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# THE INTERACTION BETWEEN GENDER AND RISKY LIFESTYLES ON PREDICTING VIOLENT VICTIMIZATION: A TEST OF THE CHIVALRY, CONVERGENCE AND EVIL WOMAN HYPOTHESES

(Spine Title: Gender, Risky Lifestyles and Violent Victimization)

(Thesis Format: Monograph)

by

Jennifer Elizabeth Angela Reynolds

Graduate Program in Sociology

' /

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts

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#### **ABSTRACT**

This thesis explores the interaction between risky lifestyle behaviours and gender in predicting violent victimization. Using a combination of routine activity theory (Cohen and Felson 1979) and lifestyle theory (Hindelang et al. 1978) and 'doing gender' literature, the chivalry hypothesis, convergence hypothesis and the evil woman hypothesis are examined. Prior research suggests that individuals with high-risk lifestyles are prone to violent victimization. In this thesis, I utilize the General Social Survey on Victimization (2004) and employ a series of logistic regressions to examine how gender and high-risk lifestyles interact to predict personal victimization. The chivalry hypothesis, convergence hypothesis and the evil woman hypothesis are examined, with the convergence hypothesis emerging as the strongest of the three theories across most risky lifestyle behaviours when examining gender interaction. There is also some mixed support for both the chivalry hypothesis and the evil woman hypothesis across the two indicators related to drinking.

**Keywords:** routine activity theory, lifestyle theory, gender theory, chivalry hypothesis, evil woman hypothesis, convergence hypothesis, victimization, violence.

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#### **CHAPTER 1**

#### INTRODUCTION

During the last several decades, criminology and victimology have continued to expand and to focus on contextual factors increasing risk. Routine activities theory and lifestyle theory have been major theoretical contributions to criminology and sociology in the past several decades. Further, these studies aim at measuring the risk of victimization based on one's exposure to crime. An overwhelming majority of these studies focus on the main effects of the concepts as outlined by the founders of routine activities theory – Cohen and Felson (1979). These concepts include target suitability/attractiveness, exposure to potential offenders and lack of guardianship. Whether the effects of routine activities on the risk of victimization vary by gender has not received much scholarly attention, that is, it is unclear from prior research whether the concepts and theory apply equally to men and women and whether or not these concepts work in the same way.

The nature of society has undergone profound changes. Women's roles have changed dramatically and women are increasingly entering the workforce, pursuing higher education, and choosing not to have children. In addition, women are beginning to spend more and more time outside of the home, and to focus their attention not only on family but also on other important aspects of life: education, careers, entertainment, to name a few. In an age where women's roles in society have changed so dramatically, it is important to assess the impact that these changing gender roles have had on routine activities and on lifestyle choices and how these changes may impact the victimization of women.

Utilizing gender theory – and more specifically, "doing gender" and "gender as performance" literature – three gender-based approaches will be explored. These approaches will be examined to assess the impact that lifestyles have on violent victimization and whether or not this differs for men and women. The first, the chivalry hypothesis, contends that – in general – women are less likely to be victimized since they are protected by men and by society. The second, the 'evil woman' hypothesis, contends that women who break gender roles – by participating in risky lifestyles – are more likely to be victimized since they are breaking gender roles and thus forfeit any protection by men or by society. The third, the convergence hypothesis, contends that as women's lifestyles become more like men's, so will their rates of violent victimization.

To illustrate these three different approaches – chivalry, 'evil woman', and convergence – consider the following example. A young woman is walking home alone one evening – decreasing her guardianship and making her a more suitable target – and a potential offender is present. The chivalry hypothesis would suggest that the offender would not be motivated to harm her, since most offenders are male and would considering harming a woman to be immoral and detrimental. In other words, it would not be considered chivalrous to harm her. The 'evil woman' hypothesis, on the other hand, would suggest that since the young woman is walking home alone at night, she is breaking gender roles (and thus, not properly doing gender) and the potential offender may be more likely to assault or rob her because she is acting in an unladylike way and should not be walking alone at night in the first place. Finally, the convergence hypothesis would suggest that the potential offender may or may not assault or rob her, but that her gender would not be part of the equation. Thus, the three hypotheses create

three separate scenarios and outcomes for the young woman. Important to note, however, is that although these approaches differ, they can overlap.

In general, we lack a clear understanding of the complex relationships between gender, risky lifestyle behaviours and violent victimization. Some researchers have, in passing, assessed the impact of gender as a control variable affecting the relationship between routine activities and victimization. The results of these studies suggest that women continue to be victimized less than men. The major limitation of these studies is that the researchers have assumed that all women are less likely to be victimized. What is missing is the test for a moderating, or interactive effect.

In this study, I intend to bridge this gap by assessing the relationship between gender, risky lifestyle behaviours and violent victimization. I use a multivariate approach and an array of variables which provide me with the opportunity to evaluate the main and interactive effects of gender and risky lifestyles on individuals' risks of violent victimization. This investigation will begin to fill the void in the literature with respect to the relationship between gender and risky lifestyles and violent victimization.

The next chapter provides a discussion of the literature on the phenomenon of routine activity theory/ lifestyle theory and the empirical research available in the area. Chapter 3 will provide a discussion of relevant gender theories and the three approaches that will be used to examine the relationship between routine activities, gender and victimization. In Chapter 4, the various methods used in this investigation are outlined. Chapter 5 presents the results and a discussion of the analyses. Chapter 6 includes a summary of the major findings of this study as well as the discussion of the implications

of the findings for policy and future research. The discussion also outlines the limitations of this study, and suggests directions for future research.

#### **CHAPTER 2**

#### ROUTINE ACTIVITIES THEORY AND LIFESTYLE THEORY

#### 2.1 INTRODUCTION

The chapter begins with a theoretical overview of routine activities theory and lifestyle theory. The history of both of the theories is discussed, followed by a discussion of the integration of both theories and their interchangeability. Following this, the contemporary applications of the theory are discussed.

In the second part of the chapter, empirical support for the theories is provided and discussed with regard to the dispersion of activities away from the home, criminogenic/high-risk lifestyle activities and times, and household (familial) versus non-household victimization as a test of routine activities theory. Finally sociodemographic variables and the importance they play in routine activities theory are discussed, followed by the limitations associated with routine activities theory and lifestyle theory.

## 2.2 ROUTINE ACTIVITY THEORY AND LIFESTYLE THEORY: AN OVERVIEW

#### 2.2.1 Brief History of the Criminal Opportunity Perspective

Wolfgang and Normandeau were among the first scholars to study victimology by investigating how the behaviour of ordinary, everyday citizens can be used to explain the prevalence and distribution of victimization. Wolfgang's (1958: 28) theory of victim precipitation sought to identify "the degree to which the victim is responsible for his/her own victimization." In his study of homicides in Philadelphia in 1958, Wolfgang identified 3 common factors seen throughout his investigation:

- 1) Often the victim and the offender knew each other
- 2) Alcohol typically played a role
- 3) The incident often escalated from a minor altercation to murder.

This provocative idea – that an individual could, in fact, contribute to his/her own victimization – gained significant popularity in the world of criminology with several different theorists – primarily Hindelang and his colleagues, Hirschi and Gottfredson, Corrado and his colleagues, and Cohen and Felson – extending Wolfgang's theory and expanding on his ideas, creating new criminal opportunity theories. These theorists sought to study the link between individual characteristics and activities and rates of victimization. This opportunity perspective in criminology highlights the importance of not only the incidence of crime, but also the location of crime in social settings.

Furthermore, it promotes the idea that some situations are more conducive to crime than are others and some individuals are more prone to victimization than are others (Wilcox et al 2002). In sum, victims contribute to their own victimization by placing themselves in high-risk places, during high-risk times, while participating in high-risk activities.

The criminal opportunity perspective has gained momentum in criminology and especially victimology over the past 3 decades, with both routine activity theory and lifestyle theory dominating the field. These theories are arguably different from victim precipitation because the creators developed them in order to demonstrate a causal link between the characteristics and activities of individuals and their rate of victimization (Birbeck and LaFree 1993: 124-127). Not only do criminal opportunity theorists stress how opportunities for crime victimization are determined by the routine activity patterns of everyday life, they emphasize the importance of studying demographic profiles of

victims when seeking to understand crime and victimization (Cohen 1981; Cohen and Land 1987). Thus, they use measures of a variety of demographic characteristics – primarily marital status, race, household composition, and income – to explain patterns of behaviour (Skogan 1981). Overall, criminal opportunity theories draw on previous work on human ecology (e.g. Hawkley 1950) and highlight the symbolic relationship between conventional, everyday activities and illegal activities.

#### 2.2.2 Lifestyle Theory: A Brief Overview

Hindelang et al (1978: 241) describe lifestyle as "...routine daily activities, both vocational activities (work, school, keeping house, etc.) and leisure activities." Routine activities are defined as

..any recurrent and prevalent activities which provide for basic population and individual needs, whatever their biological or cultural origins. Thus routine activities would include formalized work, as well as the provision of standard food, shelter, sexual outlet, leisure, social interaction, learning and childrearing (Cohen and Felson 1979: 593).

Furthermore, routine activities refer to activities that can occur (1) at home, (2) in jobs away from home, and (3) in other activities away from home (Cohen and Felson 1979: 593).

Risky lifestyles refer to lifestyles and routine activities that place an individual at an increased risk for predatory victimization. These activities place a target victim in a situation with motivated offenders and a lack of capable guardians. Risky lifestyles include such things as going out at night, alcohol consumption, walking alone at night, taking public transit at night, and so on. Each of these activities makes the individual a more desirable target victim (e.g. a drunken individual is less likely to be able to defend his/herself and therefore may be considered an easy or accessible target), exposes the

individual to motivated offenders, or places them in a situation where they have a lack of capable guardians (e.g. walking home alone at night, nighttime activities outside of the home).

Lifestyle theory was developed by Hindelang, Gottfredson, and Garofalo in 1978 and is very similar to routine activity theory. Hindelang, Gottfredson, and Garofalo (1978: 512) developed this theory to account for differences in the risks of violent victimization by asserting that "victimization is the function of the victim's lifestyle." The basic premise underlying this theory is that differences in the likelihood of victimization can be attributed to the personal lifestyles of victims (Meier and Miethe 1993: 465-468). According to the lifestyle/exposure approach, different demographic characteristics, including age, gender, income, and marital status are associated with various role expectations, which, in turn, lead to differences in lifestyles. For example, those individuals involved in certain types of activities such as being single, associating with young men, drinking, walking home alone at night, and spending time in social settings at night (i.e. bars, comedy clubs) are considered to have a "high-risk lifestyle". Thus, these individuals are more accessible to potential offenders and are more often exposed to criminal offenders, when compared with individuals who have low-risk lifestyles (stay home at night, do not drink, etc).

#### 2.2.3 Routine Activity Theory: A Brief Overview

Highly related to lifestyle theory, is the highly popular theory of victimization – Cohen and Felson's (1979) routine activity theory. This theory is based on rational choice criminology and has been considered one of the most important perspectives in criminology (Pearson and Weiner 1985; Gibbons 1985; Wilcox et al 2002). Drawing

from Hawley (1950) and his work on human ecology, Cohen and Felson argue that people are located in ecological niches with a specific tempo, pace, and rhythm in which predatory crime is seen as a way for criminals to secure basic needs or desires (at the expense of others). Routine activity theory is based on the assumption that different routine activities can increase an individual's susceptibility to victimization. Routine activities, according to Cohen and Felson, are defined as "any recurrent and prevalent activities that provide for basic population and individual needs" (1979: 593).

According to Cohen and Felson, "each successfully completed violation minimally requires an offender, with both criminal inclinations and the ability to carry out those inclinations, a person or object providing a suitable target for the offender, and absence of guardians capable of preventing violations. We emphasize that the lack of any one of these elements normally is sufficient to prevent such violations from occurring" (Cohen and Felson 1979: 590). Thus, generally speaking, routine activity theorists and researchers hypothesize that victimization rates are attributed to a combination of risk factors which refer to the situational interactions of motivated offenders and potential targets (Birkbeck and LaFree 1993: 126). Therefore, criminal opportunities emerge from the legitimate routine activities of everyday life.

#### 2.2.4 Integrating Routine Activity Theory and Lifestyle Theory

Both lifestyle theory and routine activity theory, according to Koenig (1987), aid in explaining the correlates of crime against persons. Koenig argues that the probability of criminal victimization varies by space, time and social setting. In addition, the extent to which lifestyle/routine activities increase target suitability (e.g. intoxication) and reduce effective guardianship (e.g. walking home alone at night) has a large impact on

the prevalence and probability of criminal victimization. Throughout his study of victimization, Koenig found significant evidence that for typical violent crimes (i.e. assault, robbery) victims are most likely to be young, male, and engage in evening activities away from home. Thus, their lifestyles place them in social settings with a higher risk, and increased exposure to, criminal victimization (Koenig 1987: 249-261).

Exposure, guardianship, and attractiveness are the most commonly cited risk factors. Cohen et al (1979: 245) define exposure as "the physical visibility and accessibility of persons or objects to potential offenders at any given time or place." Guardianship is defined as "the effectiveness of persons or objects in preventing violations from occurring," and attractiveness is "the material or symbolic desirability of persons or property targets to potential offenders" (1979: 245). These risk variables are relevant to routine activity theory and lifestyle theory due to the fact that they appear to be a function of target characteristics that describe potential victims. They include both contextual target variables (such as time or place) and individual sociodemographic target variables (such as education, income, race) with sociodemographic variables having an indirect effect on some risk factors and a more direct effect on others.

#### 2.2.4.1 Exposure to Motivated Offenders

Exposure to motivated offenders reflects an individual's accessibility and visibility to potential victimization (see Cohen et al 1981; Miethe and Meier 1990). For example, individuals who engage in public activity in high-risk places (e.g. bars, pubs, etc) or during high-risk times (at night), are more exposed to violent crime (or the potential for violence crime). In previous studies, exposure to violent crime was often measured using the number of certain activities undertaken by the respondent, including

going to bars or nightclubs, visiting public places where teenagers hang out, and/or taking public transit. "Higher values on this index ("dangerous activity") indicate greater exposure to high-risk situations" (Miethe and McDowall 1993: 749).

Alcohol consumption is also seen to put people at risk: "as alcohol consumption increases, so does that likelihood of suffering a personal attack or injury" (Lasley 1989: 530). This is because increased alcohol consumption – specifically in out-of-home meeting places (e.g. bars, nightclubs) – is viewed as being victimogenic in that it places individuals in a situation where they are generally more exposed to potentially dangerous persons and places. In addition, alcohol use not only increases the risk of victimization because of greater contact with dangerous persons, it can also cloud the judgment of the potential victim, increasing the probability of provocative behavior, which might be seen as a sign of weakness and vulnerability by a potential offender.

#### 2.2.4.2 Target Attractiveness

When defining target attractiveness, or target suitability, Finkelhor and Asdigan (1996) include three key dimensions: vulnerability, antagonism, and gratifiability. Studies of victimization also highlight target attractiveness, which is usually defined in regard to material or economic value to offenders (Miethe and McDowall 1993: 749). For example, a target will be more attractive to an offender if the offender will make some sort of economic gain by committing a violent crime (i.e. the target is wearing certain clothes or jewellery, driving a car, etc.).

Economic gain – however – is not the only factor shaping target attractiveness. In fact, typically, the offenders' satisfaction comes from hurting those who have threatened, insulted, or otherwise angered them (Cook 1986: 9). Further, Wilcox et al argue that

"target suitability is largely a function of constitutional characteristics, but routine activities or environmental design issues can impact target suitability, especially at the environmental level" (2002: 77). This notion is directly in line with Wolfgang's theory/analysis of victim-precipitation.

#### 2.2.4.3 Guardianship

Guardianship in routine activity theory is generally understood as the presence of persons or objects that can prevent the occurrence of crime. For example, predatory crime occurs disproportionately during evening hours. Thus, individuals who participate in nighttime activities outside the home place themselves at risk more than individuals who stay home in the evening because they are often outside the presence of capable guardians (Miethe et al 1987: 185).

#### 2.2.4.4 Overall Risky Lifestyles

Important to note, according to Farrington (1994), is that different types of risky activities occur in sync. Individuals who participate in any one of the following – drug abuse, frequent drunkenness, criminal offending, and a multitude of other vices – are equally likely to participate in any of the others. This overlapping of various problem behaviours places the individual in a situation that incurs many risks, and thus, it is these individuals that are perceived to have high risk lifestyles. Several studies have been conducted in this area internationally, and these so-called *high-risk lifestyles* and their relevance for criminal victimization have been demonstrated throughout (see, for example, Elliot et al. 1985; Moffitt 1994; West and Farrlington 1977; Harris, Duncan and Boisjoly 2002; Wright and Miller 2002). In addition, the proximity hypothesis, as outlined by Hindelang, Gottfredson and Garfalo (1978), is based on the idea that

individuals that live in close proximity to criminals are selected because they share similar backgrounds and circumstances. According to them, "association with and exposure to high risk persons in high risk locations at high risk periods increases the incident of the risk of crime" (1978: 520).

In sum, there are no major differences between lifestyle and routine activity theory. Unless otherwise noted, the terms "lifestyle" and "routine activity" will be used interchangeably throughout this thesis. Both theories involve two basic assumptions about the nature and determinants of criminal victimization:

....First, predatory crimes occur when there is a convergence in time and space of motivated offenders, suitable targets, and an absence of third-party guardians. Second, some routine activities/lifestyles (e.g. frequent nighttime or daytime activity outside the home) are riskier than others because they provide greater contact with potential offenders, enhance the visibility of a target, and/or decrease guardianship (Miethe et al 1990: 358).

# 2.2.5 Contemporary/Additional Applications of Routine Activity Theory and Lifestyle Theory

Felson continues to use the routine activity approach to explain crime and crime prevention in a number of books and articles (e.g. Felson 1996; 2002a; 2002b; Felson and Cohen 1980; Felson and Messner 1999; 1998; 2000; Felson and Ackerman 2002; Felson et al 2002; Felson and Burchfield 2004). Building on his previous research of (mainly) predatory offenses, Felson has expanded the usage of the routine activity approach in criminology to include illegal markets, white collar crime, and has continued to provide suggestions and recommendations for preventing crime through a technique currently

referred to as situational crime prevention, as developed by Ronald Clarke (Felson 2002a: 144)<sup>1</sup>.

In recent years, with the expansion of victimology, the routine activities theory has been applied often (Felson 2002a; 2002b; Mustaine and Tewksbury 1997; 1998; 2002; Tewksbury and Mustaine 2003) and extended. For example, in 2002, Mustaine and Tewksbury conducted a study using the routine activity approach to counter the "rape supportive culture" belief and to show that not all women have the same risk of sexual assault because of their routine activities Moreover, victimization is characterized as being more spatial/temporal and less random as outlined by routine activity theory (Mustaine and Tewksbury: 2002: 90). In a recent review conducted by Spano and Freilich (2009), the authors explored the quality and empirical validity of routine activities theory. The analysis included articles from mainstream journals published between 1995 and 2005 and examined the findings respecting the four key concepts (target attractiveness, guardianship, deviant lifestyles and exposure to potential offenders). The study continued with an analysis aimed at determining whether or not the pattern of findings is consistent across time, location and space. The results of the meta-analysis show

a clear pattern of support that is consistent with hypothesized effects for all four concepts. Multivariate findings for: (1) guardianship are over 5 times more likely to be protective factors; (2) target attractiveness are 3.33 times more likely to be risk factors; (3) deviant lifestyles are 7.4 times more likely to be risk factors; and, (4) exposure to potential offenders are 3.12 times more likely to be risk factors (ibid: 308).

<sup>&</sup>lt;sup>1</sup> Situational crime prevention is the analyzing of unique characteristics associated with crime problems in order to arrive at prevention solutions (Felson 1997: 23). The focus here is to change the situation leading to crime, which is typically easier and more effective than trying to change offenders themselves.

The authors conclude that the evidence in support of routine activities theory provides systematic documentation of the continuing strength of the theory.

In their book entitled Criminal Circumstance: A Dynamic Multicontextual

Criminal Opportunity Theory, Wilcox et al. (2002) discuss – in detail – the application
and relevance of routine activities and lifestyle theories in contemporary criminology.

The authors provide an in-depth description of the theories, the evidence and
specification of support for the theories over time, the theoretical and political
implications for contemporary reactions to theoretical support for the theories, and the
possibilities and limitations of future research in the area. The authors argue that although
much empirical evidence has been found in support of routine activities theory, there are
avenues of research – both quantitative and qualitative – that should be further explored
including the interaction of main effects with moderation effects.

### 2.3 ROUTINE ACTIVITY THEORY AND LIFESTYLE THEORY:

#### AN EMPIRICAL REVIEW

Both lifestyle exposure theory and routine activity theory have been the object of much empirical testing, with tests being largely supportive of both theories (Meier and Miethe 1993: 458-462). Studies testing the lifestyle/routine activity approach typically use the victimization rate (which could be overall or crime specific) as the dependent variable (Wilcox et al. 2002). The theory has been measured both cross-sectionally and longitudinally (Cohen and Cantor 1980; Cohen and Cantor 1981; Messner and Blau 1987; Bennett 1991).

Crimes against persons formed the basis for the initial development of lifestyle theory (Hindelang et al 1978), perhaps due to the fact that lifestyle typically relates to individual behaviour rather than that of households. Similarly, Cohen and Felson focused a lot of their attention on direct contact or person-to-person predatory offenses. Some of these studies are summarized below, including those that bring something new to the criminal opportunity perspective.

#### 2.3.1 Dispersion of Activities Away From the Household

In 1979, Cohen and Felson conducted a study to investigate the hypothesis that "the dispersion of activities away from households and families increases the opportunity for crime and thus generates higher crime rates" (588). The authors utilized a variety of types of available US data (such as government crime reports and statistics, police records and statistics) that supported changes in the crime rate trends between 1947 and 1974. In particular, victimization surveys and crime reports were assessed utilizing a time-series analysis to test the authors' hypothesis. Their results revealed positive and statistically significant relationships between the household activity ratio and each official crime rate change. That is, during periods when households were more active (and people spent more time outside of the home), victimization rates were higher. Regardless of which official crime rate is employed, this finding remained consistent (Cohen and Felson 1979). Important to note is that this relationship – between routine activities and victimization - continued to exist when several control variables were employed, including individual location (geographic), race, age, income and education (Wilcox et al 2002).

#### 2.3.2 Routine Activities Theory and Sociodemographic Characteristics

In a study of urban homicide in 1985 in Manhattan, New York, Steven Messner and Kenneth Tardiff employed a test of the routine activities approach. Using the background information of a sample of 578 known homicide victims, Messner and Tardiff utilized different methods of analyses to test the theory, arguing that that "the sociodemographic characteristics of age, sex, race, marital status, and employment status, along with temporal factors such as time of day, day of week, and time of year, will be related systematically to the location of homicide and to the victim-perpetrator relationship" (241). The results – with few exceptions – were generally consistent with the researchers' hypothesis, indicating that the routine activities approach does, in fact, provide a useful framework for interpreting the social ecology of urban homicide.

In 1987 Miethe, Stafford and Long expanded the study done by Cohen and Felson (1979) and conducted a study entitled *Social Differentiation in Criminal Victimization: A Test of Routine Activities/ Lifestyle Theories*. This study included a sample of 107,678 U.S. residents distributed across 13 U.S. cities. The study included measures of both the nature and quantity of routine activities outside of the home (e.g. frequency of nighttime activity) and explored the mediational effects of demographic variables. Since the authors were looking at dichotomous dependent variables (whether or not victimization occurred), they utilized a series of logit models to estimate the likelihood of violent and property victimization. They presented 3 hierarchical loglinear models to estimate each type of victimization to determine the potential mediational effects of activity/lifestyle variables. The results indicated that both routine activity variables and lifestyle variables have "relatively strong direct and mediational effects on individuals' risks of victimization" (184-194). For instance, "in combination with high nighttime activity,

major daily activity in or near the home is associated with the greater risk of violent victimization among blacks, males, the unmarried, and the young, whereas daily activity outside the home combined with high nighttime activity has the greater risk for other groups" (191).

A couple of years later, in 1989, James Lasley further extended the previous investigations related to lifestyle and routine activity theory in the U.K. by using the British Crime Survey to investigate "the causal role of drinking routines and lifestyles in the social processes of becoming the victim of predatory crime" (529). Lasley included data on both demographic and lifestyle characteristics of the 6,300 individuals who took part in the survey. His methodology included OLS and structural equation modeling. The results indicated that certain demographic characteristics – which he classified as victimogenic – were mediated by certain lifestyle characteristics. In particular, alcohol use and nighttime activities had a mediating affect on criminal victimization. Thus, those individuals classified as "high-exposure" (i.e. had lifestyles that involved routine drinking and nighttime activity) had an increased likelihood of predatory victimization (Lasley 1989: 530-541).

The results of several other studies also indicate that some demographic differences in victim risks can be attributed to differences in individuals' routine activities and lifestyles (e.g. Miethe, Stafford, and Long 1987; Kennedy and Forde 1990). In 1993, Miethe and McDowall conducted a study of 5,098 residents in Seattle. Using a multistage sample of city blocks and individual households (N=5098), the researchers were able to estimate multilevel models using a series of logistic regression models to determine how "risks of violent and property victimization are influenced by the personal

lifestyles of residents and by the characteristics of their immediate environment" (742). Miethe and McDowall argue that at a minimum, criminal acts require that victims and offenders converge in time and space (i.e. in a social and physical context). The results of their analysis showed that at an individual-level, risk of violent victimization is frequently "significantly enhanced if they are younger, participate in more dangerous public activities, have lower family incomes, and live alone" (750). Moreover, with the exception of an inverse relationship between violent victimization and income, the results are consistent with the ideas put forth in routine activity and lifestyle theories. In addition, the authors found that including contextual factors had a significant effect on violent victimization and that some of the individual-level effects can be attributed to aggregate-level conditions. Including the interaction between individual and aggregate level variables revealed that the determinants of risks of violent crime are similar across different contexts (750-754).

Zhang et al (2001) conducted a study aimed at examining whether deviant lifestyles lead to victimization and whether one's neighbourhood influences the relationship between deviance and victimization. Utilizing the data from the Buffalo Longitudinal Survey of Young Men (BLSYM), the researchers employed both crosslagged and synchronous SEQ panel models, and group analysis to determine if there was a relationship between victimization and deviant lifestyle and if this relationship was affected by neighbourhood. First, the results indicated there was a lagged effect and a synchronous effect for deviant lifestyle on victimization among young males. That is, young people who engage in high-risk lifestyles – such as heaving drinking, drug usage, and committing delinquent acts – are at an increase risk of violent victimization when

compared with young people who do not engage in high-risk lifestyles (ibid: 140). Secondly, the group analysis indicated that deviant lifestyle leads to criminal victimization in only low-crime neighbourhoods; however, this was not statistically significant. Overall, the results suggested that the neighbourhood crime rate may be a moderating variable for the relationship between risky lifestyles and victimization.

#### 2.3.3 Criminogenic/High-Risk Lifestyle Activities and Times

Using the National Crime Survey data from major U.S. cities, Miethe, Stafford and Sloane conducted a study using a panel of 33,773 individuals and 19,005 households at two distinct times, The researchers conducting this study attempted to extend previous research by examining whether or not lifestyle changes are associated with changes in one's risk of being victimized (1990). Using different methods of analysis including hierarchical linear modeling, the researchers found that regardless of the type of crime, the odds of serial victimization (i.e. being victimized numerous times) remained to be the highest for persons who maintained high levels of nighttime activity outside of the home. In addition, decreased risks of victimization were associated with decreased nighttime activities outside of the home.

Several years later, in 1997, David Forde and Leslie Kennedy conducted a study to test the relationship between risky lifestyles, routine activities, and the general theory of crime. Data from 2052 telephone interviews was collected in Alberta and Manitoba and the researchers employed maximum-likelihood covariance structure analysis. The authors found that when examining aspects of routine activities in a general theory of crime, they were able to show that opportunities afforded by risky lifestyles mediate measures of self-control: that is, individuals with low self-control have riskier lifestyles

than do individuals with high self-control. Furthermore, individuals with low self-control are more likely to be victimized and to participate in criminal offending.

Expanding the previous literature, Manual Eisner conducted a cross-national study in 2002 that aimed at examining the patterns and determinants of 4 different aspects of problem behavior: violent crime, property crime, drug use, and alcohol abuse. Eisner combined a variety of sources in his analysis, including recorded crime data from the Fifth United Nations Survey of Crime Trends and Operations in Criminal Justice Systems, the International Crime Victim Survey (ICVS), the European School Survey Project on Alcohol and Other Drugs (ESPAD), and the WHO cross-national study called Health Behaviour in School Aged Children. Among his findings were that drug use and alcohol abuse among young people occurred frequently in areas that were highly affluent and highly urbanized and where lifestyles were leisure-time oriented (222). Thus, it would appear that in North America, where there is a multitude of leisure-time available to adolescents and young adults, there is a large amount of individuals with high risk lifestyles (overlapping problem behaviours). This increase in high-risk lifestyles and overlapping problem behaviours place more individuals at risk of criminal victimization by placing them in places and situations that are more conducive to crime.

Studies demonstrate that victims of violence are often intoxicated (Auerhahn and Parker 1999; Collins 1981; Collins and Messerschmidt 1993; Dansky et al. 1997; Lasley 1989; Mustaine and Tewksbury 1998; Slade et al. 1997; Ullman, 2003). This is important considering that routine activities theory asserts that individuals with risky lifestyles — which includes those who consume alcohol — are at a heightened risk of violent personal victimization. In a study conducted by Felson and Burchfield in 2004, the researchers

examined the effect that alcohol consumption had on risk of violent victimization. Using hierarchal linear modeling (HLM), Felson and Burchfield tested for both physical and sexual assault using the National Violence Against Women survey. Their sample consisted of 6,005 physical assault cases and 1,725 sexual assault cases involving 5,861 respondents. Their results suggested that the frequency of drinking was strongly related to one's risk of victimization. That is, a higher frequency of alcohol consumption was associated with a higher risk of victimization. In addition to having a heightened risk of victimization when drinking, those who drank more heavily (6-7 drinks per evening) were particularly vulnerable to violent victimization.

### 2.3.4 Household (Familial) versus Non-household Victimization as a Test of Routine activities Theory

In 1996, David Finkelhor and Nancy Asdigian conducted an empirical test of routine activity theory using the National Youth Victimization Prevention Study — "a two-wave, random digit dial telephone survey of young people and their caretakers that looked that the exposure to and impact of victimization prevention education programs" (7). In Wave 1, 2000 interviews were conducted with youth between the ages of 10 and 16. In Wave 2, 1457 follow-up interviews were conducted. The researchers used hierarchical logistic regression and used nonfamily assaults, sexual assault and parental assault as the dependent variables. The results indicated that when predicting nonfamily assault, the proximity measure of risky behaviour — target suitability — and the exposure variable — exposure to motivated offenders — were predictors of crime, but measures related to guardianship were only marginally associated (12). Age was also found to be a predictor with younger individuals being more prone to victimization. The model for

predicting sexual assault yielded similar results with the exception of the female gender being the most powerful predictor (15).

When predicting parental assault, the model was very different from both the nonfamily assault model and the sexual assault model. "The environmental concepts of proximity and exposure (as indicated by such things as high crime neighbourhoods or risky activities) do not apply because these are not indicators of greater exposure to the offenders, who in this case are parents" (15). Thus, when predicting violent victimization outside of the home, the ideas put forth in the criminal opportunity perspective (routine activity theory and lifestyle theory) are upheld and supported by showing that people who spend more time outside of the home are more likely to be violently victimized than are those who spend more time in the home.

#### 2.3.5 Summary

In the late 1970s, when lifestyle theory had been adopted as a new and innovative approach in the study of victimization, one area gained particular interest – increases in activity outside of the home – which was repeatedly linked with higher crime rates (e.g. Cohen and Felson 1996; Cohen and Felson 1980; Cohen et al 1981). Results from several studies indicated that those individuals who are heavily involved in nonhousehold activities (day time and night time activity outside the home) have a significantly higher likelihood of being victimized than their more housebound counterparts (Hough 1987; Sampson and Woldredge 1987; Massey, Krohn, and Bonati 1989, Kennedy and Forde: 1991). In addition, certain sociodemographic factors impact the likelihood that an individual participating in risky activities would be victimized, especially age, neighbourhood, urbanicity, income, and education, and certain activities are considered to

be more risky than are others, especially drinking and participating in nighttime activities outside of the home.

# 2.4 THE IMPORTANCE OF SOCIODEMOGRAPHIC VARIABLES ON RISKY LIFESTYLE BEHAVIOR IN PREDICTING (VIOLENT) VICTIMIZATION

As indicated in the previous section, there is much evidence indicating that sociodemographic variables have an impact on risky lifestyle behavior. Hindelang et al (1978) suggest that status characteristics like age, marital status, urbanicity, sex, socioeconomic status and race are generally associated with specific role expectations which often result in routine behavioral patterns or lifestyles.

Research suggests that risky lifestyle behaviour peaks between the ages of 18 and 24 (Wilcox et al 2002). Individuals aged 18 to 24 generally have increased exposure and decreased guardianship, increasing their vulnerability to crime. As Finkelhor and Asdigian (1996: 4) argue, "young adults are viewed as engaging in risky behaviours, such as staying out late, going to parties, and drinking, which compromise the guardianship provided by parents and adults and expose them to more possibilities for victimization". In general, males (young males in particular) are most susceptible to violent victimization. Forde and Kennedy (1997) found that males are more likely than females to participate in imprudent behaviour leaving them more vulnerable to predatory victimization. In addition, males are more likely to report riskier lifestyles than are females, and are also more likely to have been involved in criminal activities Young adults are also more likely to be single (as opposed to married, common-law, or previously married). This is an important indicator because individuals who are single are

at a much higher risk of being victimized than are individuals who are married or who had been previously married (Miethe and McDowall 1993: 73). One explanation for this is that individuals without a significant other are more likely to participate in activities outside the home, and to participate in risky activities, including nighttime activities outside of the home such as going to bars, clubs, and so on. This places these individuals in situations where they are exposed to motivated offenders, and where they lack guardianship (i.e. a significant other).

Miethe, Stafford and Long (1987) found that individuals who are employed are more likely than individuals who are unemployed to be victimized. This is, at least in part, due to the fact that they are more likely to spend time outside of the home, and thus are more susceptible to predatory victimization. In addition, individuals who are employed have access to more financial resources, and thus have the luxury of participating in activities that are viewed as risky (i.e. nighttime entertainment, alcohol consumption).

Miethe, Stafford and Long (1987) also found evidence that the effect of nighttime activity was greater among whites than blacks. Lastly, living in an urban area, such as a large city, increases one's risk of being victimized (Miethe and McDowall 1993: 744). Individuals in large urban areas are more susceptible to crime because they are exposed to more motivated offenders.

In sum, the literature indicates that each of the sociodemographic variables reviewed here has an impact on the likelihood that an individual will partake in risky activities or exhibit risky behaviors. Therefore, it is important to include them as control variables in the present study.

## 2.5 LIMITATIONS OF ROUTINE ACTIVITY THEORY/LIFESTYLE THEORY

Overall, a variety of criminologists and researchers have found empirical support for routine activity theory and lifestyle theory based on several studies of personal and property crimes (Maxfield 1987). As with any theory, however, critiques and flaws exist. Cohen and Felson's (1979) routine activity theory has been the subject of many criticisms since it was employed three decades ago. Critics of routine activities theory generally question the theory's general lack of value by suggesting the ideas are common sense (Jeffery 1993; Massey, Krohn & Bonati, 1989) and also have criticized perceived research shortcomings and inadequate operationalizing of critical variables (Miethe et al 1987; Osgood 1996). Although the main premise is fundamentally the same, Felson has modified the original theory, further advancing its usefulness in criminology and victimology (Brunet 2002: 68; Felson 1996; 53).

The first major problem identified by critics concerns the use of sociodemographic or activity variables as proxy measures of risk factors. Critics argue that the use of these variables is too often based on ambiguous assumptions. For example, Cohen et al (1981: 511) argue that high income generates greater guardianship because the individual can buy protection and because marriage is more financially attainable. This places the individual in greater contact with significant others, which in turn, would make them less exposed to risk. On the other hand, Cohen et al argue that because young people are more likely to spend time outside of the home, they are less guarded than are older people who typically spend their time in the home and thus, younger people are more accessible to offenders. Unfortunately, these ideas can be contradicted. For example, having access to money places an individual in a position to be able to afford to go out more and to participate in more activities outside of the home (when compared with low income groups). In terms of age, younger people are more likely to spend their time with friends

or significant others than would older people, and thus may enjoy higher levels of guardianship. Thus it is not clear how these variables have an impact on victimization.

A second critique aimed at routine activity theory is that it provides "description of crime not an explanation" (Jeffery 1993: 492). The simple focus on societal indicators completely ignores biological indicators and elements of human behaviour associated with criminal activity. Moreover, critics argue that routine activity theory tends to ignore the available literature which associates crime with offender characteristics (social learning, psychological, identify, self-esteem). Fortunately, the latest iterations of the theory have attempted to correct this by moving toward a more complex (as opposed to a simplistic) and realistic conceptualization of the likely (or motivated) offender (Wilcox et al 2002).

Lastly, many studies based on routine activity theory use ill defined classes of crime that are situationally different and are not likely to be explained by an individual activity model. For example, Miethe et al (1987) test for a relationship between the prevalence of night time outings for entertainment and the victimization rate for both violent crimes and property crimes irrespective of time or location. The problem identified here is that sometimes crimes committed at night are not committed while people are out (i.e. they take place at home). For this reason, as Lynch describes, using routine activity models to explain crime and victimization is difficult to do (1987).

In sum – despite some potential limitations – routine activities theory is highly utilized and has consistently been represented with a large array of empirical support. It is important to note, however, that to-date this theory has been relatively gender-blind and

assumes that the same outcomes exist for men and for women. Gender theory, on the other hand, sometimes says otherwise. This will be explored in Chapter 3.

#### CHAPTER 3

# GENDER: CHIVALRY, CONVERGENCE AND EVIL WOMEN

## 3.1 INTRODUCTION

This chapter begins with a discussion of gender theory and the importance of "doing gender". Following the outlining of the importance of "doing gender" in society, the chapter provides an overview and support for the chivalry hypothesis. The chivalry hypothesis contends that women are protected and treated less harshly than men are, decreasing their risk of harm. Following this, the 'evil woman' hypothesis is outlined and described. The 'evil woman' hypothesis goes hand in hand with the chivalry hypothesis and contends that women who break gender roles and who do not "do gender" appropriately are treated less favourably, and often harsher than their male counterparts thus increasing their risk of harm.

Lastly, the convergence hypothesis is explored. This latter approach argues that with the emancipation and liberation of women, a convergence between the social roles of males and females is occurring/has occurred and this has led to a convergence in lifestyles, behaviours, and risk.

#### 3.2. GENDER THEORY: "DOING GENDER"

# 3.2.1 Brief Theoretical Overview

West and Zimmerman (1987) argue that gender has been reconceptualized to include not so much a set of traits associated with individuals, but as something that people perform in their social interactions. Thus, gender is embedded in every aspect of everyday life and an individual's actions in "doing gender" reproduce and legitimize the social meanings accorded to gender. Here, the concept of accountability emerges,

suggesting that people are held accountable for the actions they perform and that these actions should be appropriate to their gender category. West and Zimmerman further argue that "doing gender" reinforces the notion of essential differences between males and females and that gender activities act as a production of these differences.

The idea that gender differences appear to be natural and essential through "doing gender" is critical in maintaining the status quo of female subordination and male domination. Gender is done constantly – the way a person walks, talks, the products they use, the way they do their hair, the clothes they wear – and those individuals who do these things incorrectly are held accountable. Thus, to "do gender" is not always to live up to gender expectations and conceptions of femininity or masculinity, but to engage in behaviours at the risk of being assessed. For example, certain qualities are often associated with manliness – including strength, endurance, and competitive spirit, so if women partake in activities involving any of these things, they are held accountable and may be assessed as masculine or not feminine (Goffman 1977). Gender is a performance with can include punitive consequences if done improperly (Butler 1999).

According to Butler, gender norms originate within the family, and are – from birth –reinforced through a system of rewards and punishments. It is a theatrical performance and is considered to be a strategy of survival. It is rehearsed much like a script. "That gender reality is created through sustained social performances means that the very notions of an essential sex, a true or abiding masculinity or femininity, are also constituted as part of the strategy by which the performative aspect of gender is concealed," (ibid: 16). Thus, genders are part of what 'humanizes' people in contemporary society. Failure to comply with gender roles and expectations can lead to punishment. In

sum, while performing gender well provides reassurance of an essentialism of gender identity, performing it incorrectly initiates both obvious and indirect punishments (Butler 1999; Butler 2004).

"Doing gender" is influenced by feminist theory worldwide and has been perceived as a conceptual breakthrough (Messerschmidt 1997). Messerschmidt found detailed evidence of "doing gender" and the importance of abiding by one's gender category. During social interactions, he argues, we perceive sex and gender as being inseparable, and this is why incongruence can produce a cognitive dissonance within us—whereby masculine girls (and feminine boys) often are punished (Messerschmidt 1997, 143). For example, masculine girls are often bullied in school because they failed to conform to their gender category and are thus defined as the inferior other because their perceived sex category (female) was interpreted as not lining up with their gender behaviour (male).

# 3.2.2 "Doing Gender", Power, and Contemporary Application

Historically, a division in power relations has existed between men and women, with men holding most of the power. This exercise of power over women differs among men, but also differs among women. For example, heterosexual men and women are attributed with greater power than are homosexual men and women (Hester et al 1996). This leads to the notion of hegemonic masculinity and emphasized femininity as described by Connell (1987, 1995). Hegemonic masculinity and emphasized femininity are understood as culturally idealized forms of masculine and feminine behaviour and attributes within a historical setting. They are actions and ideals which are glorified, honoured, and extolled at the cultural level, individual level and symbolic level (such as

the mass media). Participation in activities outside of these realms of hegemonic masculinity and emphasized femininity – such as homosexuality – have been historically ridiculed, policed, and repressed. In addition, these discourses shape a sense of purpose and reality for most men and women and are continually renewed, recreated, defended, and modified through practice. For example, people attempt to express aspects of hegemonic/emphasized gender discourse through such things as speech, dress, appearance, activities and relationships. Further, hegemonic white male masculinity can be measured by a man's ability to control, provide for, and protect his home (and wife).

In the past, White males were also seen as the protectors of civilization, who had sole access to and the duty to protect (white) women. Connell (1987) provides examples of face-to-face power in gender relations. For example, in the Victorian era, a father could forbid his daughter to marry. More contemporary examples could include a bank manager denying a loan to an unmarried woman, a construction company hiring a man over a woman, or a person of authority giving a man a promotion over an equally (or more) qualified woman.

James Messerschmidt (1997) provides a good background and discussion of the importance of studying gender in criminology, arguing that much research currently available in the area is gender blind. In line with the ideas presented above regarding "doing gender", Messerschmidt argues that "doing gender" entails more than the "social emblems" of specific categories. Instead, he sees "doing gender" as being comprised primarily of how one interacts and presents oneself in the social setting through social interaction. Further, he argues, daily activities require individuals to act in ways that are socially identifiable according to ones (personal) classification (e.g. as male or female, or

white or African American, or rich or poor). Thus "doing gender", race, and class renders social action accountable in terms of normative conceptions, attitudes, and activities appropriate to one's category in the specific social situation in which one acts" (4). Individuals participate in self-regulating behaviour by which they monitor both their own social action and other people's social action (Fenstermaker and West 2002). Divisions, thus, are a result of people "doing gender", race, or class.

# 3.2.3 "Doing Gender": Chivalry and "Evil Women"

"Doing gender" is an important part of everyday life for both men and women. Stemming from this are two sub-approaches to studying the differential behaviours and consequences of "doing gender": the chivalry approach and the 'evil woman' approach. The chivalry approach suggests that part of "doing gender" for males is to protect women from harm and to be chivalric and heroic. The 'evil woman' approach, on the other hand, suggests that women who do not "do gender" correctly are held accountable, may not receive chivalrous treatment from men, and may – in fact – be treated harshly and/or punished. Thus, both approaches involve men and women doing gender.

These will be discussed in the next sections.

#### 3.3 CHIVALRY

Originating as a description of the proper code of behaviour for knights in the middle ages, chivalry included protective behaviour toward women (Keen 1994). In this time "ladies" were special beneficiaries of chivalry and knights were sworn to protect their innate weakness from evil and harm. In contemporary society, although women are not necessarily seen as weak creatures that need constant protection, a number of

chivalrous practices regarding them continue to exist requiring men to "do gender" by protecting women.

In the modern era, chivalry manifests itself in gentlemanly behaviours which are thought to represent respect (Kilmartin and Allison 2007). For example, opening doors for women, standing when they enter or leave a room, filling their drinks when they are empty, giving flowers or paying on dates, are all things that men frequently do to show their respect and chivalrous nature toward women. Another example can be seen with regards to the Titanic, whereby women were given priority in lifeboats (Wade 1992). For the purposes of this analysis, chivalry is more restricted to refer to the norm requiring the protection of women from harm; a norm that constrains primarily the behaviour of men. This chivalric norm, as discussed by Felson (2000a; 2002b), protects women from men but also protects women from other women (for example, men may intervene in physical fights between women to protect them from harm).

## 3.3.1 Why Chivalry?

Why do women receive chivalrous treatment? There are several possibilities.

First, as Felson argues, chivalric treatment could be the response to the economic and physical vulnerability of women. A sub-component of this argument is that men will protect women because of their reproductive and child-rearing role (i.e. men want to pass on their genetic material, and thus will protective of their wife). Another explanation provided, is that chivalry is involved in an exchange process – that is, women trade submission (sexual) for protection (Brownmiller 1975; Chesney-Lind and Hagedorn 1999; Visher 1983; Felson 2002b). The fact that men are traditionally seen as being dominant in patriarchal societies does not mean that they will always dominate their

wives, however. The men may have economic power in families (generally speaking) with the traditional division of labour, but women often have other resources at their disposal (sexual, emotional) (Felson 2002b).

The continuing influence of chivalry on conceptions of ideal male behaviour – or a component of men "doing gender" -- in Western society is well documented (see Aresty 1970; Fraser 1989; Girouard 1981). For example, societal rules and modes of behaviour consistent with the chivalric code are common in twentieth century etiquette books, particularly those prescribing men to protect women (see Vanderbilt 1963). Furthermore, according to the social-role theory of gender with regard to helping behaviour, the female role fosters behaviours which are nurturing and caring, whereas the male role fosters behaviour that is heroic and chivalrous," (Eagly and Crowley 1996).

# 3.3.2 Chivalry and an Audience

Men are significantly more likely to exhibit chivalrous treatment toward women if there are third-parties present (Felson 2002a; 2002b). For example, in a meta-analysis conducted by Eagly and Crowley in 1986, the researchers found that women were consistently more likely to receive help than were men and found that this effect was strongest when there was an audience. These findings suggest that the tendency for men to help women more than men indicates a certain level of gender performance, or "doing gender", and that this type of behaviour is considered a normative display of masculinity.

## 3.3.3 Experimental Chivalry

Several historical experiments and studies have been conducted to test effect of chivalry. In one such study, Shortell and Miller (1970) asked sixth graders to deliver

noxious noise to boys and girls. Their results indicated that the students delivered higher intensities of noxious noise to boys than they did to girls.

In other studies utilizing shock delivery, subjects were significantly more likely to deliver shocks to men than they were to deliver shocks to women (Dengerink 1976; Kaleta and Buss 1973; Taylor and Epstein 1967). This suggests that at least in an experimental setting, women are significantly less likely to be harmed (by both men and women) than are their male counterparts.

## 3.3.4 Chivalrous Treatment in the Criminal Justice System

Chivalrous treatment of women can be found throughout society, even in the most punitive realm: the criminal justice system (Daly 1989; Daly and Tonry 1997; Spohn 1999). Pre-dominantly male criminal justice officials have often been influenced by a patriarchal culture that defines women as weak and dependent and in need of protection (not punishment) (Pollak 1950; Anderson 1976; Chesney-Lind 1974; Moulds 1980; Baunach 1977; Daly 1987). When sex differences are found in criminal justice decision making, the system is almost always harsher on men than women (Daly 1987; Daly 1994). For example, women who kill their husbands receive 10 years less in prison than do husbands who kill their wives (Bureau of Justice Statistics 1995). Krohn et al (1983) suggested that the differential treatment of females in the criminal justice system has often been attributed to chivalrous attitudes and behaviours by criminal justice officials (419). Studies have shown that wherever discretionary decisions are made, women are less likely than men to be detected (Krohn et al 1983), arrested (Moulds 1978; Krohn et al 1983), to receive reduced charges or probation (Farnworth et al 1991; Turner and Johnson 2006), to be tried (Nagel and Weitzman 1971), convicted (Nagel 1972),

sentenced (Daly 1989), or to receive the death penalty (Rapaport 1991). Thus, this literature suggests, that women are protected from harm and that men "do gender" by treating women (even offenders) in a chivalrous, protective manner.

# 3.3.5 Chivalry and Victimization

Violence against women is perceived as being more harsh than violence again men. People tend to think that it is less moral to hurt a woman that it is to hurt a man. For example, Harris (1991) conducted a study and found that participants evaluated people who slapped women more negatively than people who slapped men, regardless of whether or not the adversaries were partners, friends, strangers, or family. In addition, survey evidence shows that most American men do not approve of husbands being violent toward their wives – no matter the circumstances. This finding is consistent in Canada (M.D. Smith 1990), Australia (Mugford et al Mugford 1989) and Singapore (Choi and Edleson 1996).

In addition to violence against a woman being thought of as less moral than violence against a man, society tends to believe that violence against a woman is more detrimental. This is because violence against a woman is seen to potentially cause more harm than violence against a man; therefore, men are perceived as less likely to hurt women than men, and third parties are more likely to intervene if violence ensues (Murphy and O'Leary 1989).

Also interesting to note and identify is that most offenders themselves – who are men – might be reluctant to assault women. This is because even offenders might "do gender" and thus may be less likely to harm women and may have a preference for male victims. For example, drunken young men who are looking for trouble typically assault

other young men – not women – even when potential female victims are available and easily accessible (Felson 2002b).

Another explanation, as outlined by Miller (2008), is that some men simply redefine violence. In her 2008 book entitled *Street Justice: Retaliation in the Criminal Underworld*, Miller describes the gendered practices of violent and aggression among African American young men and women in disadvantages urban communities. This study is unique in that Miller examines both young men's recollection of their involvement in gendered violence, as well as the perspectives of young women. The results indicated that young women are particularly vulnerable to violence "when young men's constructions of masculine identity rely on keen attention to respect, violence, independence, and heterosexual prowess ... [Such constructions] take hold in disadvantaged settings because young men's access to alternative avenues for garnering status and prestige are limited or absent" (ibid: 197). For example, when looking at young men's use of violence in relationships, both young men and women agreed that it was 'occasionally called for in order to re-establish the "natural" gender order' (ibid: 189).

# 3.3.6 Limitations and Summary of the Chivalry Approach

In sum, there is significant support for the chivalry argument. Women are more likely to be protect from harm (especially when an audience is involved), and are less likely to be harmed by participants in experiments, by agents of the criminal justice system, and by criminal offenders.

Nevertheless, one may argue that the fact that men are more likely than women to be victimized can be explained in other ways. For example, this differential rate in victimization may be attributed to chivalry, but could also be attributed to the fact that

men – in general – have a greater tendency to be aggressive and to provoke others (this is heightened with alcohol consumption) (Wells et al. 2000).

Also important to note, is that the existence of chivalry may reflect more than just an isolated behaviour. Chivalrous relationships between women and men are often viewed as involving a bargain or exchange. For example, men may provide chivalrous treatment in exchange for sex: a man may pay for dinner on a date, but may expect something in return.

Finally, women who receive preferential, protective treatment may "do gender" in an appropriate manner. Women who do not conform to traditional gender roles, or who do not "do gender" correctly, may be held accountable for their actions. This will be explored further in the next section.

# 3.4 "EVIL WOMEN" (AND MEN) WHO DO NOT "DO GENDER"

The notion of chivalry, as discussed in the previous section, shows that women are expected to receive preferential (protective) treatment from men. The chivalry explanation, does not, however, account for findings that under some circumstances, women fare worse than their male counterparts (Nagel and Hagan 1983). While paternalism can result in more lenient sanctions for females, it can just as easily impose more punitive penalties to serve the purpose of ensuring that females are kept in traditional, submissive roles (Horowitz & Pottieger, 1991; Steury and Frank 1990).

When women behave in ways that are consistent with role expectations of purity and submission, they receive lenient or preferential treatment. However, when women deviate from these traditional role expectations, they may be treated more severely than their male counterparts (Horowitz and Pottieger, 1991; Armstrong 1992). For example,

evidence suggests that women who are married and are thus associated with a submissive, caring role are more likely to receive preferential and protective treatment. This may be because they are expected to remain in the home to continue their dependent "maternal" function. Research suggests that unmarried women, on the other hand, or those in unconventional relationships, receive more harsh treatment, which confirms a sentencing model based on a cultural need to reinforce gender roles within a framework of heterosexual marriage or family life (Visher 1983: 6).

Judith Butler (2004) describes this phenomenon as "Undoing Gender", which she defines as a "practice of improvisation within a scene of constraint", and uses to explain how "restrictively normative conceptions of sexual and gendered life" may be undone (1). For example, Butler studies transsexuals and those who dress in drag, arguing that they are 'undoing gender' and thus are often met with hostility. Thus, Butler provides the alternative to 'doing gender' and the ramifications associated with 'undoing gender'.

# 3.4.1 The Emergence of the "Evil Woman"

It was in the 1870s and 1880s that a "new woman" appeared in Western society (Smith-Rosenberg 1985, 26). This "new woman" was single, highly educated, and economically independent. The "new woman" challenged existing gender relations and the traditional distribution of power and therefore challenged men. This "new woman" challenged the idea that white women were frail and vulnerable and were solely dependent on protection of (chivalric) men.

According to Angus McLaren (1982, 1997), the blurring of gender lines (and policing of gender boundaries to reinforce these lines) increased in the late nineteenth and early twentieth centuries. The First World War was a particularly important period. The

mobilization of civilian populations during the World War(s) weakened family structures and the plurality of gender roles. McLaren argues that men returned from war not as sexcrazed – as people thought they would – but returned and instead really desired a cozy family life. Boys became more dependent and girls became more independent (1999). In addition to changes in men, a "new woman" emerged. The emergence of this "new woman" threatened male power and control and led to the perception of a "dangerous loss of manliness" (146). Women who were categorized as "new women," and who thus did not accurately participate in "doing gender", and whose actions did not fall into line with gender appropriate expectations, were often brutalized and prosecuted. The same was true for men: McLaren (1997) documents cases where men who killed to defend their manhood were acquitted, while men who dressed like women (and thereby violated gender norms) were sentenced to hard jail time and/or physical punishment. Important to note here, is that both men and women have been treated harshly in society and in the criminal justice system when they did not abide by traditional gender roles. If they crossed boundaries they were punished and ostracized (McLaren 1982; 1997; 1999).

# 3.4.2 Selected Chivalry

According to Herzog and Oreg (2008: 48) in order to receive chivalrous treatment, women need to be subordinate to males – both socially and economically – and they are expected to fulfill the requirements of utilitarian family functions. In other words, they should be married, have children, serve as housewives, and be employed only a few hours per day at the very most. Any sort of deviation from these expectations may result in a variety of societal sanctions which could range from verbal and emotional abuse to violence (Crew 1991; Erez 1992).

Females who are caught engaging in behaviour that is consistent with the gender stereotypes for males (e.g. committing deviant acts, being aggressive, drunkenness) are more likely to be punished and to be viewed in pathological terms relative to males (Harris 1977; Harris and Hill 1982; Phillips and DeFleur 1982; Visher 1983). Female misbehaviour is more stringently monitored and corrected through negative stereotypes and sanctions (Simmons and Blyth 1987). For example, Jacobs and Wright (2005) utilize gender as the most powerful mediating variable in the retributive calculus, and argue that - generally speaking - males are reluctant to admit to engaging in direct violence against women but utilize the female proxy avengers as an acceptable alternative. Thus, the 'evil woman' approach contends that females who deviate from traditional gender roles (e.g. by being single, participating in nighttime activities, consuming alcohol) forfeit the privilege of receiving chivalrous treatment not only from men and society in general, but also from criminal justice officials (Johnson and Scheuble 1991; O'Neil 1999; Steury and Frank 1990). In other words, "paternalism occurs only to women who conform to a sex role which requires their obedience to men, their passivity and their acceptance of their status as the sexual property of only one man. Should they step outside of this boundary... chivalry is replaced by harsh exploitation and harassment" (Chesney-Lind 1979: 204).

Jody Miller (2008) also provides evidence of this, suggesting that certain types of girls – in this case, African American girls, are often victimized by persons considered to be friends or family. For example, the police may turn a blind eye to violence ensued upon these girls, leaving them to fend for themselves. Miller argues that these girls are not protected because of their flawed characteristics (they are minority women, on the street) and thus are not in need of protection.

## 3.4.3 Unladylike Behaviours: The Sexual Revolution

An important historical example of changing gender roles met with punishment occurred with the sexual revolution and with the introduction of birth control. Women who were interested in birth control, for example, or who tried it, were accused of limiting their fertility and were viewed as enemies of the family. These women were seen as sexually promiscuous and were brutalized and punished (McLaren 1997; Dean 1996). For example, if a woman was found to utilize birth control, she might be whipped and/or disowned by her family (McLaren 1997).

Another example of the importance of "doing gender" and the ramifications of breaking gender roles can be seen with the 1885 British Labouchere amendment to the *Criminal Law Amendment Act* which made acts such as sexual promiscuity, prostitution, cross-dressing, indecent exposure and the selling of obscene pictures – as identified as "gross indecency" – punishable by anything from whipping to up to two years in prison. These so-called perversions that took place against the backdrop of numerous social transformations – declining fertility, emerging feminism, the rise of white-collar work – appear to blur gender roles.

# 3.4.4 Punishing "Evil Women" in the Criminal Justice System

"Evil women" are accused of double deviance: once for the act and once for failing to conform to gender-appropriate behaviour (Herzog and Oreg 2008: 49). For example, of particular interest to this area of gender theories is the finding of criminologists Bernstein et al (1979) who indicate that when the criminal behaviour deviated from a sex-stereotypical pattern (e.g. violent offenses) female offenders were more likely to receive harsher treatment than when the offense was a "traditionally

female" crime (e.g. shoplifting) (Steury and Frank 1990). This finding was consistent among many studies testing the differential treatment of men and women in the criminal justice system at all levels including arrest, conviction, and sentencing (Erez 1992; Steury and Frank 1990)

Several studies argue that the judicial court system attempts to maintain stereotypical sex roles, protecting those women who behave in gender appropriate ways, but treating those who violate gender norms more harshly (Browker 1979; Datesman and Scarpitti 1980; DeFleur 1985; Visher 1983; Krohn et al 1983; Lundman et al 1978). For example, parole officers treat female clients more harshly than male clients, primarily because they are viewed as evil women who have deviated from gender-role expectations (Erez 1992). In addition, the type of offence committed is important – women who commit traditionally masculine crimes receive harsher treatment than do men accused of committing the same crimes (Bernstein et al 1977; Chesney-Lind 1978; Chesney-Lind 1987; Kempinen, 1983; Kruttschnitt 1984; Spohn 1999).

## 3.4.5 "Doing Gender", "Evil Women" and Victimization

Violence can be utilized by men as a control mechanism for women who do not conform to gender roles and who do not "do gender" as expected (Koss et al 2003). The root of the problem is that there exists a power and status differential between men and women, which provides men with a structural advantage to utilize violence against women. According to researchers, men often have a control motive (Dobash and Dobash 1998; Koss et al 1994). If men and women were allotted equal power and status, one would assume that deviant men or women would receive equal treatment and that free-spirited women would be subjected to the same treatment as free-spirited men.

Unfortunately, however, because men have more power, women are subjected to this control and deviant or free-spirited women may be met with resentment and negative treatment (Dobash and Dobash 1998). This mistreatment of deviant or free-spirited women can be personal (for example, a man who assaults his girlfriend for going out too often) or it could be general (a robber who steals from a woman walking alone at night, since a good woman should not be there in the first place).

According to Dobash and Dobash (1998), gender is a significant aspect of identity, social membership and the division of labour. Further, they argue, hegemonic masculinity is often associated with physical violence. Violence is thus seen as a function of society, and is sometimes utilized to express ownership (domestic violence). Women are punished for wrongdoing, or for not abiding by appropriate gender roles (Koss et al 2003). Traditionally, many men had hoped to restrict women's mobility and social life, arguing that they should be at home and thus should have restricted contact with others. Fathers control their daughters, and men control their wives. Violence is used as an important exercise of power, control and authority and is sometimes used to punish women for wrongdoing. When women exhibit behaviour viewed as being detrimental to men, it sometimes may lead to assault (Koss et al 1994). For example, after an incident of domestic violence, a husband may argue that the reason he hit his wife is because she should have known better than to drink (Koss et al 1994). Violence may also be the outcome of jealousy or possessiveness.

Another example of violence being utilized as a control mechanism can be seen through the study of sexual harassment in the workplace. Sexual harassment can act as a form of social control, and has been demonstrated in numerous studies which show that

the women who are most at risk occupy occupations that are traditionally reserved for men (Baker, 1989; Gutek, 1985; LaFontaine and Tredeau, 1986). These actions may include firing or demoting young, single, women who do not perform gender in an appropriate manner. In addition, non-white women are at an increased risk of sexual harassment if they occupy traditionally masculine occupations.

# 3.4.6 Summary and Limitations of the "Evil Woman" Approach

In sum, women who are viewed as violating sex-role stereotypes, for example, by acting in an aggressive or hostile manner, or participating in 'unladylike' activities or by being involved in typically male dominated (i.e. violent) types of crimes, are often treated more harshly than are females who do not partake in any of these sorts of behaviours/activities. The application of the 'evil woman' concept to victimization would suggest that women who break gender roles and act in 'unladylike' ways (i.e. behaviours are consistent with their male counterparts) will not be protected or treated in a chivalrous manner and will instead be at an increased risk of victimization due to a power and control mechanism exhibited by men to attempt to make sure women stay in their appropriate place and properly "do gender". For the purpose of this study, these 'unladylike' behaviours include such things as drinking and participating in activities outside of the home at night, which according to this theory will increase women's susceptibility to harsh treatment including violence.

The flipside to the chivalry approach is that men may withdraw their willingness to protect certain women who do not fail to conform to gender roles – i.e. who are perceived to be inaccurately "doing gender". It should be noted, however, that the punishment of deviant women – and women who do not conform to gender roles – may

not have anything to do with gender or an exchange whatsoever. Instead, people who engage in certain types of behaviours, particularly deviant behaviours, will lose social support, regardless of their gender. Further, people may be less inhibited about harming deviant individuals despite their gender (Tedeschi and Felson 1994). Thus, men and women who exhibit similar behaviours may be susceptible to similar treatment. This will be explored further in the next section.

## 3.5 GENDER CONVERGENCE

As a result of the emancipation and liberation movements in recent decades, women have begun to occupy different social roles than they had previously. In fact, numerous studies have shown that the behaviours of the sexes are becoming more alike (Bloomfield et al 2001). The major explanation utilized for these changes focuses on a convergence in the roles, behaviours and expectations of males and females. Here, convergence is applied where there appears to be an increasing resemblance of male and female consumption, despite which gender has shifted. In fact, Bloomsfield et al (2001) define convergence not as a closure of the gender gap, but as "a narrowing of the gender gap" (42).

For example, in a study conducted 1997 using 63 samples of undergraduates on the Bem Sex-Role Inventory and 40 samples on the Personality Attributes Questionnaire, Jean Twenge conducted a meta-analysis of masculine and feminine traits over time.

Twenge found that across all studies included in his analysis, the majority insinuated that women's masculine scale scores were increasing and were becoming more like men's.

When he compared students born in the 1970s with students born in the 1950s, he found that the former exhibited more similar role expectations than the latter, arguing that

"changing perceptions of once gender-stereotyped personality traits explain the shrinking sex differences. Undergraduates may no longer view the traits on the BSRI and PAQ as more characteristic or socially desirable of one sex and not the other" (316).

This shift in women's roles has led to the convergence hypothesis. With women's roles become less different then men's, this hypothesis predicts that the behaviour of men and women is becoming more and more similar (Cullen and Agnew 2007). As a result of the emancipation and liberation movements, women have continued to move into professions and lifestyles that are much more similar to men than in the past (Cullen and Agnew 2007). These changes in the social roles and expectations of women include such things as women living alone or cohabitating, participating in voluntary childlessness, and working in formerly male-dominated occupations (Wilsnack et al 2000). These changes in lifestyle have implications for crime and victimization, suggesting that as women's roles become more like those of men's, so too will their lifestyles, increasing their risk of victimization.

## 3.5.1 Gender Convergence and Crime

Attitudes toward the 'proper' role of women in Western society have changed dramatically over time, and many researchers have conducted studies to evaluate this theory. These studies indicate that different generations of children are exposed to different gender role expectations and that, as a result, women's participation in deviant or delinquent lifestyles may increase and approach men's (Mason et al 1976; Cherlin and Walters 1981; Hagan et al 1979; Stewart and Healy 1989; Adler 1975; Simon 1975; Steffensmeier 1980).

Chen and Giles (2003) argue that explanations for women's crime in the past tended to focus on "sex role socialization, and then with the emergence of the women's movement attention turned to the possibility that women may be gaining more opportunity to commit crime as a results of their changing role in society" (2). In 1975 Freda Adler proposed that the emancipation of women during the 1970s increased the economic opportunities available for women and allowed them to be as crime and deviance prone as men. Alder explains that while women have demanded equal opportunity in society, they have also begun to force their way into the world of major crime, including white-collar crime, murder and robbery (3). Alongside Adler, Datesman et al, suggested that the prevalence of delinquency among females was increasing, and that "these trends may be expected to accelerate as sex roles become less differentiated" (1975: 109). Thus, while males and females with different role expectations engage in diverging patterns of delinquency, males and females with similar role expectations engage in similar (or converging) patterns of delinquent, or risky, behaviour (Loy and Norland 1981).

One of the accepted premises of sociological perspectives is that as social characteristics of individuals become more similar their attitudes and behaviours become more alike. A currently popular illustration of this assumption is the suggested linkage between gender role change and criminal activity among women. Women's criminality is believed to be changing to become more like men's, and the proposed explanation for this change is a convergence of women's and men's roles (Loy and Norland 1981: 275).

Gender convergence is often studied in criminology in relation to changing crime rates over time. In a number of studies conducted in the 1970s, researchers found that female liberation was criminogenic, and that crime rates between men and women were becoming more similar (Adler 1985; Simon 1975; Berger 1995) regardless of the

crime(s) looked at. For example, in 1979, Fox and Hartnagel found that female conviction rates were increasing and argued that this may be the result of an increased exposure to opportunities for crime, as a result of extra-familiar roles adopted by women (163). Thus, the authors found evidence of a significant relationship between increases in female involvement in extra-familial roles and female arrest and conviction rates, suggesting that the convergence of the male and female social roles do, in fact, affect female crime rates. Similar studies found similar results, all arguing that there was an association between female emancipation and a convergence in crimes committed by men and women whether looking at serious felonies (Smith and Visher 1980; Box and Hale 1984; Chen and Giles 2003) or less serious offenses (Smith and Visher 1980; Austin 1982; Box and Hale; O'Brien 1997; Chen and Giles 2003). These results were significant regardless of variations over time in public, police, and judicial attitudes toward female suspects (Box and Hale 1984).

In explaining this phenomenon, the researchers have suggested that there may be reasons other than "masculinisation", or simple opportunity, that women pursuing liberation or emancipation might commit crimes, that is, researchers argue that, in general, as women and men converge in time and space, their activity patterns will also converge (Chen and Giles 2003).

# 3.5.2 Gender Convergence and Alcohol Consumption

As men and women become more similar, so do their lifestyle choices and behaviours. Further support for the convergence hypothesis can be found when looking at literature pertaining to alcohol consumption. For example, Sulkenen (1975) found that in Finland, drinking rates increased from 57% to 80% for women between 1968 and 1976.

Analyses of data collected in Great Britain and New Zealand also provide support for a convergence in alcohol consumption between men and women (Mustonen et al. 1999; Bloomfield et al. 2003).

# 3.5.3 Limitations and Summary of the Gender Convergence Approach

In sum, though gender convergence and crime and gender convergence and alcohol consumption are only two possible avenues of examining the convergence hypothesis, it is apparent that a vast amount of literature exists in support of the theory.

Not only are the lifestyles of men and women becoming more similar, gender expectations and the social definitions of gender are continuing to converge. A major limitation of this area of research is that the convergence hypothesis has mostly been supported by studies focusing on offenders and on crime rates. We know much less about the convergence of victimization. Here, the gap exists in relating convergence of lifestyles to a convergence in victimization rates. The application of the convergence hypothesis to victimization contends that as women and men become more similar in their lifestyles, they will share similar rates of violence victimization.

## 3.6 GENDER AND VICTIMIZATION

In sum, three different approaches for examining the impact of risky or deviant lifestyles for women are presented. The chivalry hypothesis suggests that women who engage in risky lifestyles or deviant actions are perceived as damsels in distress.

Offenders, who are mostly men, will be reluctant to assault them, while other people will be particularly protective or will be more likely to intervene if they are perceived to be in need of protection. For example, friends will walk women home if they drink too much.

On average, if the norms of chivalry are alive and well, women who engage in risky

lifestyles or deviant actions should have a lower risk of victimization than men who do the same.

The 'evil woman' hypothesis, on the other hand, presents the other side of the argument. Women who engage in risky lifestyles or deviant actions are perceived as defiant, unladylike, and deserving of whatever harm comes their way. Since they failed to respect gender expectations, and thus failed or "do gender" properly, they are stigmatized and are vulnerable to victimization. Offenders will not be reluctant to assault them, and may actually see them as more attractive victims, while the rest of society will look the other way and not be concerned with what happens to these evil women. On average, if "evil women" are stigmatized and left vulnerable, women who engage in risky lifestyles or deviant actions should have higher risks of victimization than men who do the same.

With regard to the convergence hypothesis, this approach argues that not only are the lifestyles of men and women converging, but gender expectations and the social definitions of gender are also converging. Offenders will not care if a target is a man or a woman. Further, women will not be seen as damsels in distress, nor will they be seen as evil women. Instead, they will be perceived the same as men. On average, this would indicate that women who engage in risky lifestyles or deviant actions should have a similar risk of victimization when compared with men who do the same.

This leads us to the proposed study.

#### 3.7 CURRENT STUDY

# 3.7.1 Research Question

The literature explored in Chapter 2 and Chapter 3 leads us to the research question of interest for this study. We are interested in examining whether or not the

effects of risky lifestyle activities on violent victimization are similar or different for women and men.

# 3.7.2 Research Hypotheses for Overall Study

# 3.7.2.1 Routine activities Theory and Lifestyle Theory

Generally speaking, I expect that those who engage in risky lifestyle activities will be more likely to be victimized than those who do not. The null hypothesis, then, would suggest that there would be no difference between those who engage in risky lifestyle activities and those who do not.

## 3.7.2.2 Chivalry Hypothesis

If the chivalry hypothesis is supported, we expect that women who engage in risky lifestyle activities will be less likely to be victimized than men who do not engage in risky lifestyle activities.

## 3.7.2.3 'Evil Woman' Hypothesis

If the 'evil woman' hypothesis is true, we might expect that women who engage in risky lifestyles activities – so-called "deviant women" – are more vulnerable to victimization than are non-deviant women.

## 3.7.2.4 Convergence Hypothesis

If the convergence hypothesis is supported, we would expect that there will be no difference in the likelihood of violent victimization between men and woman who engage in risky lifestyle activities.

# 3.7.3 Research Hypotheses for Individual Variables

Each of the hypotheses will be tested for individual variables including the following: walking home alone at night; using public transit at night; attending work,

meetings, class or volunteering at night; going to restaurants, the movies or the theatre at night; going to bars, pubs or comedy clubs at night; participating in sports, recreational activities or exercise at night; shopping at night; consuming alcohol; and binge drinking.

#### **CHAPTER 4**

#### **METHODS AND ANALYSES**

#### 4.1 INTRODUCTION

The purpose of this Chapter is to outline the methods used in this study. The first section outlines the key benefits of victimization surveys, particularly for studying routine activities and lifestyles and how they interact with an individual's proneness to victimization. The second section provides a description of the sampling frame and data collection techniques used by Statistics Canada for the 2004 General Social Survey on Victimization. This is followed by a discussion of the operational definitions of the variables used in this thesis. The final section outlines the statistical procedures used in the analyses.

#### 4.2 A BRIEF OVERVIEW OF VICTIMIZATION SURVEYS

One of the major contributors to the emergence of current victimization theories is the development of large-scale victimization surveys. "With the advent of large-scale victimization surveys...a wealth of data has become available for creating a detailed picture of victimization patterns, particularly along socioeconomic, demographic, and geographic dimensions" (Cook 1986: 5). Prior to the advent of these surveys in the 1960s, police reports and self reports were the only available data on criminal activity (Meier and Miethe 1983: 464-466). Even during the initial stages of development, these surveys addressed questions about crime that had long existed, but were difficult to examine. Furthermore, these surveys represent an alternative way to measure the amount and distribution of crime (Meier and Miethe 1983: 464).

Victimization surveys are a tool that is used both privately and publicly to measure the extent of actual crime rates as opposed to reported crime rates; that is, victimization surveys include incidents that are not reported to the police. The Canadian Center for Justice Statistics, for example, conducted nation-wide victimization surveys in 1988, 1993, 1999 and 2004 (Statistics Canada 2004). These surveys request that the public report any incidents of victimization, regardless of whether or not they have been formally reported. In particular, the victimization surveys include classification variables and seek to study the perceptions of risk and safety, criminal victimization, abuse and violence by a partner or ex-partner and senior abuse (Gottfredson 1986: 252-267). The data acquired from these kinds of surveys have been used to study many criminological issues including family violence, sexual assault, attitudes toward the criminal justice system in Canada, and perceptions of personal safety (Statistics Canada 2004).

Most important to this particular study, however, is that victimization surveys provide the researcher with information about the ecology of crime, including types of crime, victim-offender relationships, the location(s) of incidents, and so on. In addition, victimization surveys provide researchers with information regarding both demographic and lifestyle characteristics of victims (Sparks 1982, Statistics Canada 2004).

#### 4.3 THE DATA

This study used data from The General Social Survey (GSS) on Victimization (Cycle 18), which was conducted by Statistics Canada over a 12 month period in 2004 (Statistics Canada 2004). The main objective of the Victimization survey is to collect data about Canadians' experiences of being victims of crime and their fears, perceptions of crime and the criminal justice system. Another objective of the survey is to collect

information on routine activities, particularly regarding nighttime and evening activities outside of the home.

The questionnaire for Cycle 18 contained both classification (demographic) indicators, as well as core indicators. Classification content consisted of indicators such as age, sex, income, visible minority status and education. The core component included variables to measure Canadians' outlook on crime and the criminal justice system, as well as their fear of crime. The core content in Cycle 18 was the fourth used to collect information on victimization, repeating a lot of the core content of the previous victimization cycles which were carried out in 1988, 1993, and 1999. Finally, the focus content of Cycle 18 offered information on confidence in the criminal justice system (police, courts, etc.) and perceptions of safety (physical and household).

The target population of the Victimization Survey was all persons 15 years of age and older residing in Canada. Approximately 24,000 people were successfully interviewed between January and December of 2004 using Computer-Assisted Telephone Interviewing (CATI); the response rate was 75%. Since respondents were contacted by telephone, persons living in households without telephones were excluded from the survey. Non-responses included respondents who refused to participate, respondents who could not be reached, and respondents who could not communicate well enough in English or French to complete the survey (Statistics Canada 2004). The sample included participants from all 10 provinces, and was weighted accordingly. The total sample size for this thesis includes 23 750 respondents (N=23 750), with 10 592 males and 13 158 females successfully completing the survey. A total of 2557 (or 11%) of respondents indicated that they had experienced some form of personal victimization in the 12 months

prior to being surveyed. Of these respondents, 90 reported being robbed, 81 reported that someone had attempted to rob them, and 671 respondents reported that they had been physically assaulted. For the purpose of this thesis, only these crimes will be utilized in the analyses (n=842 or 4% of the sample).

## 4.4 MEASUREMENT OF VARIABLES

# 4.4.1 Dependent Variable: Violent Victimization

As previously noted, personal violent victimization is conceptualized as a multidimensional construct that includes different dimensions and crimes. The dependent variable is based on whether or not respondents experienced a violent crime during the last 12 months. Violent crime includes being physically attacked or threatened (e.g. assaulted), or having something stolen by force (e.g. robbery, attempted robbery). This analysis includes predatory violations involving direct physical contact between at least one offender and at least one person or object which that offender attempts to take or damage. For the purpose of this study, domestic assault and sexual assault were not included because these crimes typically do not take place in public places (see Miethe et al 1987).

In the GSS, respondents were asked to indicate their most serious personal victimization in the past 12 months. The options here included the following: sexual assault, robbery, attempted robbery, theft of personal property, and attempted theft of personal property. From the GSS, three items were selected as possible measures of the construct: victim of assault, victim of robbery, or victim of attempted robbery. These three categories were used to create a multi-item variable (*violent victimization*) which included any respondents that indicated they were a victim of an assault, robbery, or

attempted robbery. As shown in Table 5.2, 842 respondents were victims of a robbery, attempted robbery or assault (4% of the total respondent pool).

# 4.4.2 Independent variables

# 4.4.2.1 Sex as an Explanatory Variable

Gender is known to have an effect on risky behaviour. There is a significant body of literature that finds that women generally have less risky lifestyles and generally exhibit fewer risky behaviours than do their male counterparts. On the other hand, they can also be more vulnerable because of differences in physical size and strength, especially because most offenders are male (are bigger and stronger) (Felson 1996).

Within the present analysis sex was entered as a dummy variable with males coded as zero and females coded as one. In this case, males are the group of reference. Thus, in testing the chivalry hypothesis and the feminist hypothesis, as described in Chapter 3, sex is used as an interaction variable in order to identify whether or not the effects of risky lifestyles on violent victimization are similar or different for women and men.

# 4.4.2.2 Lifestyle/Routine Activity Variables

Exposure to crime is an indicator of an individual's vulnerability to crime (Cohen et al 1981). Potential victims are placed in risky situations at particular times (target suitability), under particular circumstances (lack of guardianship), and with particular kinds of persons (motivated offenders) (Meier and Miethe 1993: 481). This exposure to crime can be a direct result of an individual's routine activities and lifestyle. Furthermore, as the literature has shown, risks of certain types of personal victimization (i.e. robbery

and assault) increase with the amount of time spent in public spaces – particularly at night.

The independent variables include measures of criminogenic conditions underlying routine activity theory and lifestyle theory (i.e. exposure to motivated offenders, target attractiveness, and guardianship). The independent variables selected from the GSS have been categorized into 3 separate risk categories: risky nighttime modes of transportation, nighttime activities/entertainment, and alcohol consumption. These will be discussed in the following subsections.

# (i) Risky Nighttime Modes of Transportation

An individual's mode of transportation can have an impact on his/her proneness to victimization, especially if the individual walks home alone at night, or uses public transit at night. Both of these variables increase target suitability by placing the individual in a situation where he or she lacks guardianship (i.e. being alone and vulnerable at night).

For this study, 2 variables from the GSS were used: the frequency an individual walks home alone after dark, and the frequency an individual uses public transportation after dark. Responses were recoded from 5 categories ('Daily', 'At least once per week', 'At least once per month', 'Less than once a month', 'Never') into a dummy variable with 1= Yes ('Daily', 'At least once per week') and 0=No ('At least once per month', 'Less than once per month', 'Never'). In this case, individuals who do not use public transit at night, or walk alone at night, represent the reference category.

### (ii) Nighttime activities/entertainment

Given that victimization occurs disproportionately at night (see Clarke 1997; Clarke and Felson 1993; Messner and Tardiff 1985; Hindelang et al. 1978), the frequency of nighttime entertainment was the best available measure of a set of activities that could increase individuals exposure to risk. Several questions were included in the GSS to measure nighttime activities and will be used in this analysis: times per month in the evening the respondent goes to work/attends class/attends meeting/volunteers; times per month in the evening the respondent goes to restaurants or movies or to the theatre; times per month in the evening the respondent goes to bars or pubs or comedy clubs; times per month in the evening the respondent participates in sports or exercise or recreational activities; and, times per month in the evening the respondent goes shopping (including window shopping)<sup>2</sup>.

Physical proximity to high-crime areas is seen as a major factor that increases victim risk. From this perspective, certain places (e.g. bars) are more dangerous than others because they attract certain kinds of people for whom crime is more likely. The five measures of nighttime activity included in this study represent 5 different types of nighttime entertainment that range from somewhat risky (simple exposure to nonhousehold activities after dark such as working/volunteering) to very risky (bars/comedy clubs). It is important to have this range so that alternative hypotheses can be assessed (e.g. that all nighttime entertainment activities pose the same risks).

Each of these indicators was measured with values ranging from 'Never' to '31 times per month'. For the purpose of this analysis, each of these 5 variables were dummy coded, with respondents that indicated they participated in the nighttime activities 6 or

<sup>&</sup>lt;sup>2</sup> Due to small n sizes in certain cells, the variable assessing the number of times per month in the evening a respondent goes to casinos or bingos was not included in the analysis.

more times per month being coded '1'. Thus, the reference group includes those individuals indicating that they participated in the activity(ies) less than 6 times per month.

# (iii) Alcohol Consumption

Routine drinking activities have an impact on victimization by making individuals less rational and more irritable and by decreasing reaction time (decreasing guardianship and increasing tarrget suitability for motivated offenders). In the GSS, respondents were asked how often they drink alcoholic beverages: 'Everyday', '4-6 times per week', '2-3 times a week', 'Once a week', 'Once or twice in the past month', 'Never in the past month', and 'Never drinks'. They were also asked how often in the last month they have had 5 or more drinks (range from '0' to '31'). Both of these variables serve as good indicators of risky lifestyle behaviour: those who drink more are more likely to be exposed to, or be in close proximity to, crime.

Both of these variables were dummy coded:

- 1) 'How often do you drink alcoholic beverages' was recoded to 'Do you drink alcoholic beverages' with the reference category being 'No' (included 'Never in the past month' and 'Never'). Those who indicated that they did drink ('Everyday', '4-6 times per week', '2-3 times a week', 'Once a week', 'Once or twice in the past month') were coded as '1' ('Yes').
- 2) 'How often in the last month did you have 5 or more drinks' was recoded to 'Do you drink 5 or more alcoholic beverages on any given day' with the reference category being 'No' (included those who said '0' times per month).
  Those who indicated that they did drink 5 or more alcoholic beverages in any

given day (range from '1' time per month to '31' times per month) were coded as '1' ('Yes').

This coding allows our analyses to differentiate between the effects of casual drinking versus heavy drinking.

### 4.4.2.3 Interaction Terms

Interaction variables allow us to estimate the effects on the dependent variable of any interaction between the independent variables. "The regression model, even one employing dummy variables, assumes that the effects of the independent variables on the dependent variable are additive. However, in the presence of interaction, these effects will not be strictly additive" (Allen 2007). In the case of logistic regression, we can test for the presence of interaction using interaction terms that multiply the interaction variable (sex) by the independent variable(s). Thus, sex was multiplied by each of the independent variables in the current study. The interaction terms are as follows:

- 1. Gender x nighttime work, volunteering, or meetings
- 2. Gender x nighttime restaurants, movies, or theatre
- 3. Gender x nighttime bars, pubs, or comedy clubs
- 4. Gender x nighttime sports, recreation activities, or exercise
- 5. Gender x shopping (includes window shopping)
- 6. Gender x nighttime use of public transit
- 7. Gender x walk home alone at night
- 8. Gender x drink alcohol
- 9. Gender x drink 5 or more drinks in one evening

#### 4.4.3 Control Variables

As previously noted, violent victimization tends to vary according to certain socio-demographic characteristics. The following section outlines the variables that were used to clarify the relationship between violent victimization and risky lifestyle behaviours.

# (i) Age Group

Age has been shown to affect problem behaviour and is strongly correlated with high risk lifestyles and routine activity proxy measures. It is often thought to be a linear process where risky behaviour peaks between the ages of 16-25 and then starts to decline in a linear fashion. The current analysis includes respondents over the age of 15 years old. Single years of age were available in the GSS, but the descriptive statistics on this variable by violent victimization revealed that many cell frequencies had an insufficient number of cases. In the present study, age was coded in three successive categories: '15-24 years', '25-44' years and '45 or more years'.

# (ii) Household Income

Household income is important to include as a control variable because often problem behaviours are correlated with lower socioeconomic status. In the GSS, respondents were asked to estimate the total income of all household members from all sources before deductions during the past twelve months. Household income was measured at the ordinal level with twelve successive response categories ranging from 'no income' to '\$80 000 or more'. Due to the small number of respondents in the lower income categories and because of the need to reduce the number of dummy predictors, the variable was collapsed into four categories: '\$29 999 or less', '\$30 000- \$49 999', '\$50 000-\$79,999' and '\$80,000 or more'.

# (iii) Education

Education was used as another proxy measure of socioeconomic status.

Individuals with less education generally have a lower SES, or are adolescents or young adults (placing them at greater risk of violent victimization). In this study, the highest level of education attained was measured at the ordinal level using three categories: university education, high school education, and less than high school education. The first category included those respondents with a doctorate, a masters degree, or a bachelors degree. The second category included those respondents with a diploma/certificate from either a community college or a trade/technical college, those who completed some university, community college/ CEGEP/ nursing, trade/technical education, and those who were successful in attaining their high school diploma. The final category included those respondents with some secondary/high school, any elementary schooling, or no schooling.

### (iv) Marital Status

In the GSS, there were five separate marital status categories: married, living common-law, widowed, divorced, separated, and single (i.e. never married). Due to the small number of respondents who were widowed, divorced, or separated, these categories were collapsed into one category: previously married. To reduce the number of dummy predictors for marital status, the married category and the common-law categories were combined to make one category: currently married. Therefore, marital status was measured using three categories: single (never married), currently married, or previously married. It is important to note that by collapsing the categories in this manner, it is assumed that those respondents who were either married or living common-law were a

homogeneous group and that those who were widowed, divorced, and separated respondents were also a homogeneous group. As described in chapter 2, marital status is an important contributor to violent victimization because single individuals are known to have different lifestyles and are more likely to lack effective guardianship when compared with those who are married or previously married. This makes them more suitable targets for potential offenders.

# (v) Visible Minority Status

Many studies indicate that race plays a vital role in violent victimization: those that identify as visible minorities are more prone to personal victimization. Individuals who self-identify as being visible minorities often have a low socioeconomic status and come from undesirable neighbourhoods, making them more suitable targets in the presence of motivated offenders. In this study, visible minority status was entered as a dummy variable with those self-identifying themselves as visible minorities being coded as one. In this case, non-visible minority respondents are the reference category.

Important to note, is that this variable is the only one available to test for 'ethnicity' or 'race', which restricts the analyses; particularly because this is a self-reported measure and thus can be problematic. A more specific measure of 'ethnicity' would be useful as a control for the current study.

# (vi) Previous Criminal History

Accounting for previous criminal history is crucial in this study as risky lifestyles are affected by this variable; that is, those individuals who have been arrested are more likely to have risky lifestyles and exhibit risky behaviours than are individuals without a previous criminal history. In this study, previous arrest is the indicator for previous

criminal history. Previous criminal history is dichotomous and consists of either Yes or No categories. It is dummy coded with no previous arrests being the reference category.

# (vii) Urbanicity

The majority of violent crime occurs in urban areas, and thus including an urban/rural indicator as a control variable in this study is essential. In the GSS, urbanicity is measured using three categories: urban, rural, and residents of Prince Edward Island. In this study, respondents from PEI were grouped with individuals from rural populations, due to small n sizes. The urban/rural indicator was dummy coded with rural being the reference category. Important to note, is that this measure of urbanicity is quite simplistic and is the only variable available for measuring spatial context. Better measures of urbanicity and neighbourhood context are desirable, but unavailable.

# 4.4.4 Missing Data

All variables used in this study were checked for missing values. Listwise deletion of cases in such a situation is not considered problematic, in terms of the generalizability of the results, if less than 5 percent of the cases are deleted (Bohrnstedt and Knoke 1994). In this study, listwise deletion of cases with missing values for the 'previous arrest' control variable was used, which resulted in an acceptable loss of cases (n=16).

Descriptive statistics for many of the other variables, however, revealed that there was a substantial number of missing cases. These included:

(i) the independent variables:

- a. nighttime activities (times per month in the evening...), where respondents did not answer the question (not stated), or where respondents selected the 'less than once a month' category;
- b. drink alcoholic beverages, where respondents indicated that they did
  not know the answer or that they did not wish to state the answer
  (n=624);
- c. drink 5 or more alcoholic beverages, where respondents were not asked if they indicated that they did not drink alcoholic beverages at all, indicated that they did not know, or did not respond to the question (not stated) (n=8875).
- (ii) control variables, including: household income (n=5262), education (n=450), marital status (n=104), and visible minority status (n=771), where the respondent did not state the answer, or indicated that they did not know the answer.

In order to solve this problem, an 'unknown' dummy variable was created for each of the above mentioned variables (independent variables and control variables), which was included in the analyses a control to test for the effects of the missing values. For example, when respondents were asked to self-identify as being visible minorities a total of 770 cases were missing. An 'unknown visible minority' dummy variable was created, with missing cases being coded 1, and the reference category including the remaining 22 995 respondents who answered 'yes' or 'no' when asked whether or not they were visible minorities.

#### 4.5 STATISTICAL ANALYSES

The analyses consist of descriptive statistics and multivariate statistics. Each of these will be outlined in the following sections.

# 4.5.1 Descriptive Statistics

Violent victimization (assault, robbery, attempted robbery) is described and compared in terms of the key variables used in the logistic regression analysis (independent variables, control variables).

#### 4.5.2 Multivariate Statistics

Given a dichotomous dependent variable, a series of logistic regression were employed as the main analytical technique utilized in this study. Logistic regression allows the researcher to predict a discrete outcome (such as group membership) from a set of variables. In logistic regression, the outcome variable (Y) is the probability of having one outcome or another based on a nonlinear function of the best linear combination of predictors. Furthermore,

"logistic regression generates the coefficients (and its standard errors and significance levels) of a formula to predict a logit transformation of the probability of presence of the characteristic of interest:

$$logit(p) = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + ... + b_k X_k$$

where p is the probability of presence of the characteristic of interest. The logit transformation is defined as the logged odds:

odds = 
$$\frac{p}{1-p}$$
 =  $\frac{probability of presence of characteristic}{probability of absence of characteristic}$ 

and

logit(p) = 
$$ln \left[ \frac{p}{1-p} \right]$$
 "(Pampel: 2000: 148).

This technique is more flexible than multiple regression and discriminant analysis, and thus was selected as the strongest analytical technique for this particular study. It is also important to note that logistic regression, overall, emphasizes the probability of a particular outcome for each case (and is non-linear). Logistic analysis can also be particularly beneficial when the distribution of dependent variable responses is thought to be nonlinear with one or more of the independent variables, as is the case in the current study (Tabachnick and Fidell 1996: 437). Furthermore, in compiling a series of logistic regression it is possible to include interaction terms – an essential component of this study. As in OLS regression, one can add interaction terms to the model simply by multiplying the explanatory variable (sex) by an independent variable (ex. 'gender x walk home alone at night').

The multivariate analysis for this study consisted of three separate but related parts. The first part assessed the impact of the control variables on violent victimization. A logistic regression analysis was used to compare each of the categories of the control variables and their impact on violent victimization. The second part included separate regression models for each of the independent variables included in the study. Each model included the dependent variable, control variables, and 1 of the 9 independent variables<sup>3</sup> (as well as the unknown variable created to control for missing values). The third part included separate regression models for each of the independent variables, with the addition of the appropriate interaction term. Each model included the dependent variable, control variables, an independent variable (as well as the unknown variable created to control for missing values), and the interaction term associated with that

<sup>&</sup>lt;sup>3</sup> A series of logistic regressions were included, testing one independent variable at a time, in order to reduce multicollinearity (since many of the independent variables are correlated).

independent variable (i.e. for the walk alone at night individual variable, 'gender x walk home alone at night' was introduced).

In sum, a multivariate approach will be utilized to develop models to examine a variety of measures for routine activities and whether or not there exists an interaction between risky lifestyles and gender on predicting violent victimization. In the next chapter, the results of these analyses will be presented.

#### **CHAPTER 5**

#### RESULTS

## 5.1 INTRODUCTION

In this section, the results of the relationship between risky lifestyle activities and violent victimization are examined. In addition, the link between risky lifestyle activities and violent victimization is further explored with the introduction of sex based interaction variables.

The first part of this chapter focuses on the impact of risky lifestyle behaviours on violent victimization. The first results provided are descriptive statistics on the sample. They describe the distribution of all of the key variables (dependent, independent, controls) in the sample. The second part of this chapter presents the logistic regression analysis of the basic model (dependent variable and controls). In the third section of this chapter, 4 separate models will be presented for each of the independent variables, and will be discussed with reference to the hypotheses as outlined in Chapter 3. Model 1 will consist of sex, violent victimization and the independent variable of interest. Model 2 will consist of sex, violent victimization, the independent variable of interest, along with the controls. Model 3 will include sex, violent victimization, the independent variable of interest, the controls, and the interaction term (sex x independent variable of interest). Model 4 will consist of a basic model and will include sex, violent victimization, the independent variable of interest, and the interaction term. In the final section, the overall results are summarized and briefly discussed with reference to the main research question and hypotheses (see Chapter 3).

Table 5.1 presents the variables in the analyses and the categorical breakdown of these variables in the sample. Seven demographic characteristics are controlled for. These variables are sex, age, household income, education, marital status, visible minority status, previous criminal history (arrest) and urbanicity. The statistics regarding violent victimization are presented here, as are the statistics for each of the measures of risky lifestyle activities and behaviours utilized in this study. These include walking home alone at night, using public transit at night, times per month in the evening the respondent goes to work/attends class/attends meeting/volunteers, times per month in the evening the respondent goes to restaurants or movies or to the theatre, times per month in the evening the respondent participates in sports or exercise or recreational activities, times per month in the evening the respondent goes shopping, whether or not the individual consumes alcohol, and whether or not the individual drinks 5 or more drinks (in one evening).

#### 5.2 DESCRIPTIVE AND BIVARIATE ANALYSES

#### 5.2.1. Control Variables

Table 5.1 shows that the sample is made up of slightly more women (55%) than men (45%). The age breakdown of the sample indicates that 13% are between the ages of 15 and 24, 37% are between the ages of 25 and 44, and 51% are 45 years or older.

Compared to men, women are more likely to be older (more women fall in to the 45 years or older category, and more men fall in to the 15-24 age category).

Although over half of the total sample is married (55%), women are less likely than men to be single (23% and 29% respectively) and are also less likely to be married

(52% and 56% respectively). Compared to men, women are more likely to indicate that they had been previously married (25% and 12% respectively).

Regarding ethnicity, 8% of the total sample self-identify as being part of a visible minority group. In terms of residence, three in four respondents indicate that they reside in an urban area (75%) with the remaining 25% identifying that they live in a rural area. For both of these variables, the results were consistent between men and women.

Only 1% of the sample report that they had been arrested in the previous year<sup>4</sup>. Important to note, is that men are significantly more likely than women to indicate that they had been arrested in the 12 months prior to participating in the survey (1.7% versus 0.4% respectively).

Household income is divided into four categories: \$29,999 or less, \$30,000 to \$49,999, \$50,000 to \$79,999, and \$80,000 or more. Respondents with incomes of \$29,999 or less account for 20% of the sample, respondents with incomes between \$30,000 and \$49,999 account for 18% of the sample, respondents with incomes between \$50,000 and \$79,999 account for 21% of the sample, and finally, respondents with incomes of \$80,000 or higher account for 19% of the sample. Compared with men, women are more likely to fall in to the lowest income category (23% and 16% respectively) and are more likely to indicate that they did not know their household income (25% versus 19%).

Regarding education, over half of the sample (56%) indicate that they have either a diploma/certificate from a community college or a trade/technical college, have completed at least some university, or were successful in attaining their high school

<sup>&</sup>lt;sup>4</sup> Though those respondents who indicated that they had been previously arrested accounted for only 1% of the sample, this variable was used as a control because the initial regression models showed that it was highly significant.

diploma. Another 22% of the sample indicate that they have less than a high school education. The remaining 20% indicate that they have a university degree or higher (includes those respondents with a doctorate, a masters degree, or a bachelors degree). Compared to men, women in this sample are more likely to have a college certificate/diploma, to have completed some university, or to have obtained their high school diploma.

Table 5.1 Sample Characteristics of Control Variables

	Total	}	Male		Female	
	N	%	N	%	N	%
Gender	-					
Male	10 592	44.6	10592	100.0	0	0.0
Female	13 158	55.4	0	0.0	13 158	100.0
Age				<del>                                     </del>		-
15-24	2963	12.5	1449	13.7***	1514	11.5***
25-44	8663	36.5	3917	37.0	4746	36.1
45+	12 124	51.0	5226	49.3***	6898	52.4***
Marital Status						
Single	6100	25.7	3054	28.8***	3046	23.1***
Married	12 994	54.7	6198	58.5***	6796	51.6***
Previously Married	4552	19.2	1298	12.3***	3254	24.7***
Unknown	104	0.4	42	0.4	62	0.5
						1
Urban Indicator					,	1
Yes	17 889	75.3	7926	74.8	9963	75.7
No	5861	24.7	2666	25.2	3195	24.3
Previous Arrest						
Yes	230	1.0	177	1.7***	53	0.4***
No	23 520	99.0	10 415	98.3***	13 105	99.6***
	23 320	99.0	10413	96.3	13 103	99.0
Education						
University	4848	20.4	2225	21.0**	2623	19.9**
High school	13 226	55.7	5729	54.1***	7497	57.0***
Less than high school	5227	22.0	2429	22.9**	2798	21.3**
Unknown	449	1.9	209	2.0	240	1.8
Visible Minority						
Yes	1876	7.9	875	8.3	1001	7.6
No	21 874	92.1	9717	91.7	12 157	92.4
Unknown	770	3.2	359	3.4	411	3.1
Household Income						
\$29,999 or less	4699	19.8	1674	15.8***	3025	23.0***
\$30,000-\$49,999	4378	18.4	1896	17.9	2482	18.9
\$50,000-\$79,999	4910	20.7	2522	23.8***	2388	18.1***
\$80,000 or more	4509	19.0	2489	23.5***	2020	15.4***
Unknown	5254	22.1	2011	19.0***	3243	24.6***

Notes: N = 23,750; \*= p < .05; \*\*= p < .01, \*\*\*= p = .000

# 5.2.2. Dependent Variable: Violent Victimization

Respondents were asked about their most serious personal victimization in the 12 months preceding the GSS survey. The categories include sexual assault, robbery, attempted robbery, assault, theft of personal property, attempted theft of personal

property. For the purpose of this study, only robbery, attempted robbery, and assault were analyzed (see Chapter 4).

Of those reporting some form of personal victimization, 4% reported that they have been robbed, 3% reported that someone has attempted to rob them, and 26% reported that they have been assaulted. These statistics were combined to form an overall violent victimization variable (see Table 5.2), which included 4% of the total sample indicating that they have experienced one of these forms of personal violence (n=842).

Chi-square analysis shows significant group differences in violent victimization based on sex (see Table 5.2); victims of violent crimes are more likely to be male (63% versus 37% for females). Also interesting to note, is that significant differences are present related to age, marital status, and previous criminal activity. Victims of violence tend to be single (53% versus 32% married and 15% previously married). They also tend to be younger (32% were 15 to 24 and 44% were 25 to 44). Finally, victims of violent crimes are significantly more likely than their non-victimized counterparts to indicate that they had been arrested in the 12 months prior to being surveyed (7% versus <1%).

Table 5.2 Sample Characteristics of Dependent Variable: Violent Victimization

	Total	1	Male	T	Female	
	N	%	N	%	N	%
Victim of Robbery or Assault						
Yes	842	3.5	525	5.0***	315	2.4***
No	22 908	96.5	10 065	95.0***	12 843	97.6***

Notes: N = 23,750; \* = p < .05; \*\* = p < .01, \*\*\* = p = .000

# 5.2.3 Independent Variables: Risky Lifestyle Activities and Behaviours

The next group of variables contains the nine proxy measures of risky lifestyle behaviours and activities that have been broken down in to 3 categories, including risky nighttime modes of transportation, nighttime activities/ entertainment, and alcohol

consumption. The descriptive statistics related to each of the proxy measures for the total sample, and for men and women separately, are discussed below.

# 5.2.3.1 Risky Nighttime Modes of Transportation

As shown in Table 5.3, almost half of the sample (46%) indicate that they walk home alone at night. Another 9% indicate that they use public transit at night. Compared to men, women are significantly less likely to report walking home alone at night (33% versus 62%) or using public transit at night (8% versus 10%).

Table 5.3 Sample Characteristics of Independent variables: Risky Nighttime Modes of Transportation

MIUUCS UI	114	nspoi tam	711			
	Total N	%	Male N	%	Female N	%
Walk Alone at Night						
Yes	10 922	46.0	6541	61.8***	4381	33.3***
No	12 828	54.0	4051	38.2***	8777	66.7***
Unknown	2632	11.1	439	4.1***	2193	16.7***
Public at Transit at Night						
Yes	2052	8.6	1011	9.5***	1042	7.9***
No	21 697	91.4	9581	90.5***	12 116	92.1***
Unknown	16 350	68.8	7081	66.9***	9269	70.4***

Notes: N = 23,750; \*= p < .05; \*\* = p < .01, \*\*\* = p = .000

Bivariate analyses between risky nighttime modes of transportation and propensity for violent victimization show that respondents who walk home alone at night or who take public transit at night are significantly more likely to be victimized than those respondents indicating that they do not walk home alone or use public transit at night (see Table 5.4).

Table 5.4 Violent Victimization by Risky Nighttime Modes of Transportation

	Victim N	%	Non-Victim N	%
Walk Alone at Night				
Yes	550	5.0	10 372	95.0
No	292	2.3	12 536	97.7
			d.f. = 1	p = 0.000
Public at Transit at Night				
Yes	159	7.7	1894	92.3
No	683	3.1	21 014	96.9
			d.f. = 1	p = 0.000

Notes: N = 23,750

# 5.2.3.2 Nighttime Activities/ Entertainment

Of the five different nighttime activity variables that were analyzed, respondents are most likely to indicate that they work, attend meetings, attend night classes, or volunteer at least 6 times per month (38% of the sample) (see Table 5.5). Over 1 in 5 respondents (28%) indicate that they participate in sports, recreational activities, or exercise in the evening at least 6 times per month. Eighteen percent of respondents report going to restaurants, to the movies, or to the theatre at least 6 times per month, and another 15% report that they shop in the evening (including window shopping) at least 6 times per month. Respondents are least likely to go to bars, pubs, or comedy clubs more than 6 times per month with only 5% indicating that they do so. With the exception of nighttime shopping (including window shopping), when compared with men, women are significantly less likely to participate in each of the nighttime activities.

Table 5.5 Sample Characteristics of Independent variables: Nighttime Activities/ Entertainment

Activities/	Entertain	HIEHIT		<del></del>		1
	Total		Male		Female	1
	N	%	N	%	N	%
Work, Volunteer, Meetings,						
Schools in the Evening						
0-5 Times Per Month	14 706	61.9	6130	57.9***	8576	65.2***
6 or More Times Per Month	9044	38.1	4462	42.1***	4582	34.8***
Unknown	48	0.2	28	0.3*	20	0.2*
Restaurants, Movies, Theatre in the Evening						
0-5 Times Per Month	19 489	82.1	8498	80.2***	10 991	83.5***
6 or More Times Per Month	4261	17.9	2094	19.8***	2167	16.5***
Unknown	1450	6.1	574	5.4***	876	6.7***
Bars, Pubs, Comedy Clubs in the Evening						
0-5 Times Per Month	22 639	95.3	9899	93.5***	12 740	96.8***
6 or More Times Per Month	1111	6.1	693	6.5***	418	3.2***
Unknown	1484	6.2	678	6.4	806	6.1
Sports, Recreational Activities, Exercise in the Evening						
0-5 Times Per Month	17 017	71.7	7166	67.7***	9851	74.9***
6 or More Times Per Month	6733	28.3	3426	32.3***	3307	25.1***
Unknown	889	3.7	435	4.1**	454	3.5**
Shop (incl. Window Shopping) in the Evening					<del></del>	
0-5 Times Per Month	20 160	84.9	8989	84.9	11 171	84.9
6 or More Times Per Month	3590	15.1	1603	15.1	1987	15.1
Unknown	1180	5.0	528	5.0	652	5.0

Notes: N = 23,750; \* = p < .05; \*\* = p < .01, \*\*\* = p = .000

Bivariate analyses indicate that for each of the independent variables, victims are significantly more likely than non-victims to engage in nighttime activities or entertainment outside of the home at night at least 6 times per month (see Table 5.6). Those respondents who report going to bars, pubs, or comedy clubs are at the greatest risk of being victimized, with 9% of victims indicating that they engaged in these forms of nighttime entertainment. This finding suggests that of all of the nighttime activities and

forms of entertainment included in this investigation, going to bars, pubs, or comedy clubs poses the biggest threat.

Table 5.6 Violent Victimization by Nighttime Activities/ Entertainment

	Victim		Non-Victim	
	N	%	N	%
Work, Volunteer, Meetings, Schools in the				
Evening				
0-5 Times Per Month	393	2.7	14 313	97.3
6 or More Times Per Month	449	5.0	8595	95.0
			d.f. = 1	p = 0.000
Restaurants, Movies, Theatre in the Evening				
0-5 Times Per Month	599	3.1	18 890	96.9
6 or More Times Per Month	243	5.7	4018	94.3
			d.f. = 1	p = 0.000
Bars, Pubs, Comedy Clubs				
in the Evening				
0-5 Times Per Month	741	3.3	21 898	96.7
6 or More Times Per Month	101	9.1	1010	90.9
			d.f. = 1	p = 0.000
Sports, Recreational Activities, Exercise in the Evening				
0-5 Times Per Month	507	3.0	16 510	97.0
6 or More Times Per Month	335	5.0	6398	95.0
			d.f. = 1	p = 0.000
Shop (incl. Window Shopping) in the Evening				
0-5 Times Per Month	693	3.4	19 467	96.6
6 or More Times Per Month	149	4.2	3441	95.8
		-	d.f. = 1	p = 0.033

Notes: N = 23,750

# **5.2.3.3 Alcohol Consumption**

Lastly, when asked about alcohol consumption, almost 2 in 3 respondents (63%) report that they do, in fact, consume alcoholic beverages (see Table 5.7). Of these respondents, 23% report drinking at least 5 beverages in 1 evening (referred to as binge or heavy drinking). Compared to men, women are significantly less likely to drink (42% versus 70% respectively) and are also significantly less likely to engage in binge drinking (15% versus 32%).

Table 5.7 Sample Characteristics of Independent variables: Alcohol

Consumption

	Total N	%	Male N	%	Female N	%
Consume Alcohol						
Yes	15001	63.2	2845	70.3***	5284	42.5***
No	8749	36.8	7747	29.7***	7874	57.5***
Unknown	620	2.6	314	2.4**	321	2.9**
Drink 5 or More Alcoholic Drinks in One Evening						
Yes	5382	22.7	3397	32.1***	1985	15.1***
No	18 368	77.3	7195	67.9***	11 173	84.9***
Unknown	8864	37.3	3227	30.5***	5637	42.8***

Notes: 
$$N = 23,750$$
; \* = p < .05; \*\* = p < .01, \*\*\* = p = .000

As seen in Table 5.8, victims are more likely to consume alcohol than non-victims (3.9% and 3.0% respectively). In addition, victims are more likely to binge drink than are non-victims (6.4% and 2.7% respectively).

Table 5.8 Violent Victimization by Alcohol Consumption

	Victim N	%	Non-Victim N	%
Consume Alcohol				
Yes	580	3.9	14 421	96.1
No	262	3.0	8487	97.0
			d.f. = 1	p = 0.001
Drink 5 or More Alcoholic Drinks in One Evening				
Yes	342	6.4	5040	93.6
No	500	2.7	17 868	97.3
			d.f. = 1	p = 0.000

Notes: N = 23,750

In summary, these analyses indicate that there are many significant differences between men and women in their lifestyle choices (across control variables and independent variables) and their rate of violent victimization. In addition, there are many significant differences between victims and non-victims in their lifestyle choices. In the next section, numerous logistic regression models are presented and interpreted.

# 5.3 MULTIVARIATE ANALYSIS

Binary Logistic Regression: Predicting Violent Victimization

As mentioned at the end of Chapter 4, the multivariate technique chosen for this study is logistic regression. Specifically, the analysis will proceed with binary logistic regression analyses for the dependent variable: Violent Victimization (robbery, attempted robbery, assault in the 12 months prior to being surveyed).

First, a preliminary model including the dependent variable and control variables has been computed and interpreted. Following this, a number of separate models have been created for each of the independent variables in order to reduce multicollinearity<sup>5</sup>. For each independent variable, the first model examines sex and the individual independent variables (e.g. sex and walk alone at night). The second model also includes these variables, but extends further to include each of the control variables (age, marital status, urbanicity, previous arrest, education, visible minority status, and income). The third model includes each of these variables (sex, the independent variable, and the controls) and introduces the interaction term for the lifestyle variable being studied (e.g. sex, walk alone at night, controls, and sex x walk alone). Finally, a basic model will be computed to include sex, the independent variable, and the interaction term (e.g. sex, walk alone at night, sex x walk alone).

#### 5.3.1 Violent Victimization and Social Demographics (Control Variables)

The original model for this study included the dependent variable and each of the control variables (see Table 5.9). A statistically significant (p<.05) difference is found to exist between the constant-only model and the model with the main effects of the control variables, which implies that the inclusion of these variables does improve our ability to

<sup>&</sup>lt;sup>5</sup> Due to the fact that many of the independent variables for highly correlated (i.e. an individual who participates in one of the activities is likely to participate in a number of activities), each independent variable was measured in separate regression models in order to remedy the problem of multicollinearity.

predict whether or not an individual has been violently victimized in the 12 months prior to being surveyed. As seen in Table 5.9, women are 49% less likely than males to be victims of violence. Also, when compared with the reference group (15-24), respondents aged 24-44 are 30% less likely to be victimized, and those aged 45 or older are 71% less likely to be victims of violence. In addition, married people are 56% less likely to be victimized when compared with single people, and residents of urban areas are 1.37 times more likely to be victimized than are residents of rural areas. Previous arrest is – by far – the largest predictor of victimization, with the results indicating that those who have been arrested in the 12 months prior to completing the survey are 4.76 times more likely than those who have not been arrested to be victimized. Also, those who self-identify as visible minorities are 26% less likely to be victimized and those respondents who did not state or who did not know their annual household income were 24% less likely to be victimized.

In order to determine the amount of variance accounted for by these variables, the Nagelkerke R-square was used. This Pseudo-R-squared was chosen since, like the Cox and Snell, it accounts for sample size, and because it also adjusts the Cox and Snell statistic, so that a value ranging anywhere between zero (0) and one (1) can be calculated (Tabachnick and Fidell 1996). According to this statistic, the predictors in this model account for 10% of the variance.

Table 5.9 Logistic Regression measuring the effects of the control variables on violent victimization

	Mode	el 1
	В	Odds
Sex		
Male	-	1.00
Female	-0.67***	0.51
Age	-	
15-24	-	1.00
25-44	-0.36**	0.70
45+	-1.25***	0.29
Marital Status		
Single	-	1.00
Married	-0.82***	0.44
Previously Married	-0.17	0.85
Unknown	0.33	1.39
Urban Indicator		
Yes	0.31**	1.37
No	-	1.00
Previous Arrest		
Yes	1.56***	4.76
No	-	1.00
Education		
University	-0.01	0.99
High School	0.04	1.05
Less Than High School	-	1.00
Unknown	0.54	1.51
Visible Minority		
Yes	-0.31**	0.74
No	-	1.00
Household Income		
\$29,999 or Less	-	1.00
\$30,000-\$49,999	-0.12	0.88
\$50,000- \$79,999	-0.01	0.99
\$80,000 or More	0.08	1.08
Unknown	-0.27**	0.76
Constant	-2.20**	
Nagelkerke R-square	0.010***	<u> </u>

Notes: N = 23,750; \* = p < .05; \*\* = p < .01

# 5.3.2 Violent Victimization and Risky Modes of Transportation

As discussed previously, two measures of risky nighttime modes of transportation have been employed in this analysis which includes walking alone at night and utilizing public transit at night. Each of the 4 models computed for each these independent variables are presented below (see also Table 5.10 and Table 5.11).

# 5.3.2.1 Walk Alone at Night

#### Model 1

As shown in Table 5.10, women are 42% less likely than men to be victimized, and those who walk alone at night are 1.74 times more likely to be victimized. This model accounts for only 3% of the variance and is significant at p=0.000.

#### Model 2

Model 2 includes the dependent variable, the control variables, and the first of the risky nighttime activity variables: walk alone at night. Similar to the original model presented above in Table 5.9, those who are male, young (15-24 years of age), single, non-minority, live in urban areas, or have been arrested, are most likely to be victimized. The inclusion of the control variables decreases the strength of the relationship between walking home alone at night and being violently victimized. Still, those individuals indicating that they walk home alone at night are 1.36 times more likely to be victimized. This model accounts for 11% of the variance in the propensity for victimization and is significant at p=0.000.

#### Model 3

Model 3 includes each of the variables from Model 2 and introduces the interaction term (sex x walk alone at night). Here, the interaction term renders a non-significant result.

### Model 4

Model 4 includes sex, walk alone at night, and the interaction term (i.e. is the basic model for testing the interaction). Here, even with the control variables omitted, the interaction remains non-significant.

Overall, as expected, walking alone at night increases ones risk of being violently victimized (consistent with Ha). All of the relationships between the variables and differences in likelihood of being victimized are significant – as expected – with the exception of visible minority respondents. Here, white respondents are significantly more likely than visible minority respondents to be victimized. We fail to observe interactive evidence that individuals who walk alone at night are particularly likely to be victimized based on their gender. This absence of interaction is in line with the convergence hypothesis.

Table 5.10 Logistic Regression measuring the interactive effects of gender by

walking alone at night on violent victimization

	Mode	1 1	Mode	el 2	Mode	13	Mode	14
	В	Odds	В	Odds	В	Odds	В	Odds
Gender								
Male	-	1.00	-	1.00	-	1.00	-	1.00
Female	-0.54***	0.58	-0.56***	0.57	-0.43**	0.65	-0.39**	0.68
Age								
15-24			-	1.00	-	1.00		
25-44			-0.32**	0.72	-0.32**	0.72		
45+			-1.13***	0.32	-1.12***	0.32		
Marital Status		· · · · · · · · · · · · · · · · · · ·						
Single			-	1.00	-	1.00		
Married			-0.80***	0.45	-0.80***	0.45		
Previously Married			-0.11	0.89	-0.12	0.89		
Unknown			0.38	1.47	0.39	1.48		
Urban Indicator						1		
Yes	1		0.32**	1.38	0.32**	1.38		
No			-	1.00	-	1.00		<del>                                     </del>
Previous Arrest								
Yes			1.54***	4.65	1.53***	4.64		
No			1 -	1.00	_	1.00		
Education	-					1		
University	<del></del>		-0.07	0.93	-0.07	0.93		<u> </u>
High School			0.01	1.01	0.01	1.01		1
Less Than High School	<u> </u>		-	1.00	-	1.00		1
Unknown	<del>                                     </del>		0.53*	1.70	0.53*	1.70		
Visible Minority	<del>                                     </del>	<u> </u>	-		1.00			
Yes		<u> </u>	-0.29**	0.75	-0.29**	0.82		
No	-	<del>                                     </del>	-	1.00	-	1.00		†
Household Income								
\$29,999 or Less	<u> </u>	<del> </del>	_	1.00	-	1.00		
\$30,000-\$49,999			-0.13	0.89	-0.13	0.88		
\$50,000-\$79,999	+	<u> </u>	-0.02	0.98	-0.02	0.98		
\$80,000 or More		<u> </u>	0.08	1.09	0.08	1.08		
Unknown	<del>                                     </del>	†	-0.24**	0.79	-0.24**	0.79		
Walk Alone	<del> </del>				1			
Yes	0.55***	1.74	0.30**	1.36	0.40**	1.49	0.66***	1.94
No	1.	1.00		1.00		1.00	-	1.00
Unknown	-0.88**	0.42	-0.58**	0.56	-0.61**	0.55	- 0.91**	0.40
Gender x Walk Alone	1	†	-	1	-0.21	0.81	-0.25	0.78
Constant	-3.31***		-2.45***		-2.52***	1	-3.39***	
Nagelkerke R-square	0.003***		0.011***		0.011***		0.003***	1

Notes: N = 23,750; \*= p < .05; \*\*= p < .01; \*\*\* = p = .000

# 5.3.2.2 Use Public Transit at Night

# Model 1

As shown in Table 5.11, men are 58% more likely than women to be victimized, and those who utilize public transit at night are 1.58 times more likely to be victims of

assault. The model is significant at p=0.000 and the Nagelkerke R-square indicates that the model accounts for 4% of the variance.

#### Model 2

Model 2 indicates that single, white males between the ages of 15 and 24 who have been arrested are most likely to be victims of violence (see Table 5.11). Important to note, is that in this model urbanicity is not significant, suggesting that those who use public transit, regardless of area of residence, have a similar likelihood of being victimized. As seen in Table 5.11, introducing the control variables decreases the strength of the relationship between utilizing public transit at night and being violently victimized (Model 1 versus Model 2); however, those who use public transit at night continue to be more likely to be victimized (1.26 times more likely than those who do not use public transit at night). The total model accounts for 11% of the variance in the likelihood of violent victimization and is significant at p=0.000.

#### Model 3

Model 3 includes sex, the controls, using public transit at night, and the interaction term (sex x use public transit at night). Generally speaking, the results are quite similar to the results presented in Model 2 in regards to the relationship between violent victimization and each of the controls. This model accounts for 11% of the total variance in the likelihood of violent victimization and is significant (p=0.000).

# Model 4

In Model 4, sex, using public transit at night, and the interaction term are computed. With the exclusion of the controls, the interaction term continues to generate a

non-significant result, and the Nagelkerke R-square and chi-square statistics remained consistent with Model 1 (3% and p=0.000 respectively).

Overall, as expected, using public transit at night increases the probability of violent victimization (consistent with Ho). The combination of the variables in Models 2 and 3 account for 11% of the variance at the p=0.000 level in the dependent variable. Similar to those who walk alone at night, the majority of significant relationships between variables and violent victimization are as expected, with the exception of visible minority status (as previously discussed). Also important to note, is that those who come from urban areas are – generally speaking – more prone to victimization than are their rural-residing counterparts. However, this is not the case for those who use public transit: respondents residing in urban or rural areas are equally likely to be victims of violence while utilizing public transit.

Another interesting finding here in regards to using public transit at night occurred with the introduction of the interaction term, which resulted in the use of public transit becoming non-significant. Since we fail observe interactive evidence of a relationship between one's gender and utilizing public transit at night in predicting violent victimization, the results are in line with the convergence hypothesis<sup>6</sup>.

<sup>&</sup>lt;sup>6</sup> The constant remains significant throughout each of the models (p=0.000) indicating that the inclusion of variables improves our ability to predict violent victimization.

Table 5.11 Logistic Regression measuring the interactive effects of gender by

utilizing public transit at night on violent victimization

	Mode	el 1	Mode	el 2	Mode	el 3	Mode	el 4
	В	Odds	В	Odds	В	Odds	В	Odds
Gender								
Male	-	1.00	-	1.00	-	1.00	-	1.00
Female	-0.73***	0.48	-0.66***	0.52	-0.70***	0.50	-0.75***	0.47
Age								
15-24			-	1.00	-	1.00	-	
25-44			-0.30**	0.74	-0.30**	0.74		
45+			-1.13***	0.32	-1.14***	0.32		
Marital Status			1					
Single			-	1.00	_	1.00		
Married			-0.76***	0.47	-0.76***	0.47		
Previously Married			-0.10	0.90	-0.10	0.91	<u> </u>	
Unknown			0.43	1.53	0.42	1.52		
Urban Indicator				1.00	51.72	1.02		<b>†</b>
Yes	<u> </u>		0.12	1.13	0.12	1.13		<u> </u>
No	1			1.00	-	1.00		
Previous Arrest	<del>                                     </del>			1.00		1.00	<b>†</b>	
Yes	-		1.53***	4.60	1.53***	4.62	<b>†</b>	<del> </del>
No	<b>†</b>		-	1.00	-	1.00		
Education				1				
University	+-		-0.05	0.95	-0.04	0.96		
High School			0.04	1.04	0.04	1.04		
Less Than High School	-	<u> </u>	- 0.0 /	1.00	- 0.0	1.00	<del>                                     </del>	
Unknown	<del> </del>		0.54*	1.72	0.54*	1.72		
Visible Minority	<u> </u>		0.51	12	0.5 1	1.,,2	1	
Yes		<b></b>	-0.39**	0.67	-0.40**	0.67		
No			-	1.00	-	1.00	<del> </del>	· · · · · · · · · · · · · · · · · · ·
Household Income	+		<del> </del>	1.00		1.00	<u> </u>	
\$29,999 or Less		<del>                                     </del>	1_	1.00		1.00		
\$30,000-\$49,999	<u> </u>		-0.10	0.91	-0.09	0.91	<u> </u>	
\$50,000-\$49,999			0.04	1.04	0.04	1.04	1	
\$80,000 or More			0.14	1.15	0.14	1.15		
Unknown			-0.22*	0.80	-0.22*	0.80		
Public Transit	<u> </u>		0.22	0.00	0.22	- 0.00		1
Yes	0.46***	1.58	0.23**	1.26	0.14	1.16	0.40**	1.50
No	- 0.40	1.00		1.00	-	1.00	-	1.00
Unknown	-0.67***	0.51	-0.39***	0.68	-0.39***	0.69	-0.67***	0.51
Gender x Public Transit	1 20.07	0.51	0.57	0.00	0.22	1.25	0.15	1.16
Constant	-2.62***	<del>                                     </del>	-1.98***	<del> </del>	-1.97***	1.23	-2.61***	10
Nagelkerke R-square	0.004***	1	0.011***	<del> </del>	0.011***	<del>                                     </del>	0.003***	<del>                                     </del>

Notes: N = 23,750; \*= p < .05; \*\* = p < .01; \*\*\* p = .000

# 5.3.3 Violent Victimization and Nighttime Activities/ Entertainment

As discussed previously, five measures of nighttime activities/ entertainment are utilized in this analysis which include work/attends classes/attends meeting/volunteers; restaurants or movies or to the theatre; bars or pubs or comedy clubs; participates in

sports or exercise or recreational activities; and, shopping (including window shopping)<sup>7</sup>. Each of the Models computed for these five variables are presented below and in Tables 5.12 through 5.16.

# 5.3.3.1 Work/ Attends Class/ Attends Meetings/ Volunteers in the Evening Model 1

As shown in Table 5.12, females continue to be less likely than males to be victimized. Model 1 reveals that there are significant differences between those who work, attend classes, attend meetings, or volunteer at night and those who do not; those that do are 1.8 times more likely to be victims of robbery, attempted robbery, or assault. This model accounts for a total of 3% of the variance and is significant at p=0.000. *Model 2* 

Model 2 (see Table 5.12) introduces the controls, and further confirms that young, white, single, males, living in urban areas, who have been previously arrested, are significantly more likely to be victimized than their older, non-white, female counterparts who reside in rural areas and do not have a record of prior arrest. Going to work, attending meetings, attending class, or volunteering continues to be a strong predictor for violent victimization, though the odds has decreased for 1.80 times in Model 1 to 1.51 times in Model 2. This model accounts for 11% of the variance and is significant at p=0.000.

## Model 3

Model 3 includes those variables from Model 2, with the introduction of an interaction term (sex x work, meetings, classes, volunteers). The results remained

<sup>&</sup>lt;sup>7</sup> Again, these variables were dummy coded to include: 0-5 times per month= 0; 6 or more times per month=1.

consistent with Model 2 (including the Nagelkerke R-square and chi-square statistics), and the introduction of the interaction term renders no significant results.

### Model 4

Model 4 is a presentation of the basic model and indicates that with the control variables omitted, there continues to be no significant interactive effect.

Overall, as expected, working, attending classes or meetings, or volunteering in the evening increases one's likelihood of being violently victimized (consistent with Ha). The combination of dependent variable, controls, independent variable, and interaction term in Model 3 accounts for 11% of the variance at the p=0.000 level in the dependent variable. Similar to those who walk alone at night or who use public transit at night, the majority of significant relationships between variables and violent victimization are as expected, with the exception of visible minority status (as previously discussed<sup>8</sup>). The absence of interaction here is in line with the convergence hypothesis.

<sup>&</sup>lt;sup>8</sup> This remains consistent throughout the remainder of the results but will not be discussed further. That is, visible minority respondents are significantly less likely than white respondents to be victimized across all models.

Table 5.12 Logistic Regression measuring the interactive effects of gender by working, volunteering, attending meetings or going to school at night on violent victimization

	Mode	11	Mode	12	Mode	13	Mode	14
	В	Odds	В	Odds	В	Odds	В	Odds
Gender								
Male	-	1.00	-	1.00	-	1.00	-	1.00
Female	-0.72***	0.49	-0.66***	0.52	-0.59***	0.56	-0.71***	0.49
Age								
15-24			-	1.00	-	1.00		
25-44			-0.34**	0.71	-0.35**	0.71		
45+			-1.18***	0.31	-1.18***	0.31	i	
Marital Status						1		
Single			-	1.00	-	1.00		
Married			-0.81***	0.45	-0.81***	0.45		
Previously Married			-0.15	0.86	-0.15	0.86		
Unknown			0.33	1.39	0.33	1.39		
Urban Indicator								
Yes			0.32**	1.37	0.32**	1.37		
No			-	1.00	-	1.00		
Previous Arrest	1							
Yes	1		1.55***	4.72	1.56***	4.74		
No			-	1.00	-	1.00		
Education						1		
University			-0.07	0.93	-0.07	0.93		
High School			-0.03	97	-0.03	0.97		
Less Than High School			-	1.00	-	1.00		
Unknown								
Visible Minority					1			
Yes			-0.32**	0.73	-0.32**	0.73		1
No			-	1.00	-	1.00		
Household Income					<u> </u>			
\$29,999 or Less			-	1.00	-	1.00		
\$30,000-\$49,999			-0.14	0.87	-0.14	0.87		
\$50,000- \$79,999			-0.04	0.96	-0.04	0.96		
\$80,000 or More			0.06	1.06	0.06	1.06		
Unknown			-0.26**	0.77	-0.26**	0.77		
Work, Volunteer, Meetings,								
School								
Yes	0.59***	1.80	0.41***	1.51	0.48***	1.59	0.59***	1.81
No	-	1.00		1.00		1.00	-	1.00
Unknown	-0.37	0.69	-0.39	0.68	-0.37	0.69	-0.37	0.69
Gender x Work, Meetings,					-0.14	0.87	-0.01	0.99
Class, Volunteer		<u> </u>						
Constant	-3.23***		-2.37***		-2.40***		-3.24***	
Nagelkerke R-square	0.003***		0.011***		0.011***		0.003***	-

Notes: N = 23,750; \*= p < .05; \*\*= p < .01; \*\*\* = p = .000

# 5.3.3.2 Restaurants, Movies, Theatre in the Evening

# Model 1

As shown in Table 5.13, women are 52% less likely than men to be victims of assault, robbery or attempted robbery. This model accounts for 3% of the variance in the

likelihood of being violently victimized and is significant at p=0.000. As expected,

Model 1 reveals that there are significant differences between those who go to

restaurants, the movies, or the theatre in the evening and those who do not; those that do

are 1.8 times more likely to be victims of violence.

### Model 2

Model 2 (see Table 5.13) includes each of the control variables and is consistent with the findings described in Model 2 for walking alone at night, using public transit at night, and working, going to meetings or classes, or volunteering at night. Thus, it is further confirmed that young, white, single, males, living in urban areas, who have been previously arrested, are significantly more likely to be victimized than their older, non-white, female counterparts who reside in rural areas and do not have a record of prior arrest. Going to restaurants, the movies, or the theatre continues to be a strong predictor for violent victimization despite the addition of the controls, though the odds of being victimized has decreased from 1.80 times in Model 1 to 1.51 times in Model 2. The combination of the variables in the model accounts for a total variance of 11% at p=0.000 in the dependent variable.

#### Model 3

Model 3 includes the dependent variable, the controls, the independent variable (works, attends meetings or classes, volunteers) from Model 3 and introduces an interaction term (sex x restaurants, movies, theatre). The results are consistent with Model 2 (including the Nagelkerke R-square and chi-square statistics), with the introduction of the interaction term rendering no significant results.

#### Model 4

Model 4 is a presentation of the basic model (sex; restaurants, movies, theatre meetings/volunteers; and sex x restaurants, movies, theatre) and is consistent with Model 3 in showing that despite having omitted the control variables, there continues to be no gender-based interactive effect.

Overall, Models 1 through 4 which test the relationship between sex, violent victimization and going to restaurants, the movies, or the theatre, remain consistent with the results from the above analyses. That is, as expected, going to restaurants, movies, or the theatre in the evening increases ones likelihood of being violently victimized (consistent with Ha). The combination of the dependent variable, controls, independent variable, and interaction term in Model 3 accounts for 11% of the variance at the p=0.000 level in the dependent variable. Again, the results are in line with the convergence hypothesis since we fail to observe interactive evidence that individuals who go to restaurants, the movies, or to the theatre at night are particularly likely to be victimized based on their gender.

Table 5.13 Logistic Regression measuring the interactive effects of gender by going to restaurants, movies or the theatre at night on violent victimization

	Mode	el 1	Model 2		Model 3		Model 4	
	В	Odds	В	Odds	В	Odds	В	Odds
Gender								
Male	-	1.00	-	1.00	-	1.00	-	1.00
Female	-0.73***	0.48	-0.67***	0.51	-0.67***	0.51	-0.73***	0.48
Age								
15-24	1		-	1.00	-	1.00		
25-44			-0.33**	0.72	-0.33**	0.72		
45+			-1.20***	0.30	-1.20***	0.30		
Marital Status								
Single			-	1.00	-	1.00		
Married			-0.79***	0.45	-0.79***	0.45		
Previously Married			-0.15	0.86	-0.15	0.86		
Unknown			0.37	1.44	0.37	1.44		İ
Urban Indicator				1				<u> </u>
Yes			0.30**	1.35	0.30**	1.35		
No	<u> </u>		-	1.00	-	1.00		
Previous Arrest						1		
Yes			1.54***	4.67	1.54***	4.67		
No			-	1.00	-	1.00		
Education				1				
University			-0.03	0.97	-0.03	0.97		
High School		1	0.03	1.03	0.03	1.03		
Less Than High School			-	1.00	-	1.00		
Unknown			0.54*	1.70	0.54*	1.71		
Visible Minority								
Yes			-0.30**	0.74	-0.30**	0.74		
No			-	1.00	-	1.00		
Household Income								
\$29,999 or Less	Ī		-	1.00	-	1.00		
\$30,000-\$49,999			-0.14	0.87	-0.14	0.87		
\$50,000- \$79,999			-0.04	0.96	-0.04	0.96		
\$80,000 or More			0.04	1.05	0.04	1.05		
Unknown			-0.27**	0.76	-0.27**	0.76		
Restaurants, Movies,								
Theatre								
Yes	0.58***	1.79	0.21**	1.23	0.21**	1.23	0.58***	1.79
No	-	1.00	_	1.00	-	1.00	-	1.00
Unknown	-0.44**	0.65	-0.25	0.78	-0.25	0.78	-0.44**	0.65
Gender x Restaurants,					0.00	1.00	0.00	1.00
Movies, Theatre								
Constant	-3.07***		-2.25***		-2.25***		-3.07***	
Nagelkerke R-square	0.003***		0.011***		0.011***	-	0.003***	

Nagelkerke R-square 0.003\*\*\* 0.011\*\*\* 0.011\*\*\* 0.003\*\*\* Notes: N = 23,750; \* = p < .05; \*\* = p < .01; \*\*\* = p = .000

## 5.3.3.3 Bars, Pubs, Comedy Clubs in the Evening

## Model 1

As shown in Table 5.14, women are 51% less likely than men to be victimized.

Those men and women who go to bars, pubs, or comedy clubs in the evening are 2.60

times more likely to be victimized than those who do not. This model accounts for only 3% of the variance and is significant at p=0.000.

#### Model 2

As shown in Table 5.14, Model 2 includes the dependent variable, the control variables, and the next independent variable: going to bars, pubs, or comedy clubs in the evening. Similar to the original model presented above in Table 5.9, those who are male, young (15-24 years of age), single, non-minority, live in urban areas, or have been arrested, are most likely to be victimized. The inclusion of the control variables decreases the strength of the relationship between going to bars, pubs or comedy clubs and being violently victimized; however, those individuals indicating that they go to bars, pubs or comedy clubs are still 1.27 times more likely to be victimized. This model accounted for 10% of the variance in the propensity for victimization and was significant at p=0.000. *Model 3* 

Model 3 includes each of the variables from Model 2 and introduces the interaction term (sex x bars, pubs, and comedy clubs). The results are consistent with those outlined above (i.e. that the interaction term is not significant).

#### Model 4

Model 4 is simplistic and includes sex, going to bars, pubs, comedy clubs, and the interaction term. Once again, even with the controls omitted, the interaction remains non-significant.

Overall, Models 2 and 3 explain a total of 10% of the variance in violent victimization at p=0.000. As expected, going to bars, pubs, or comedy clubs in the

evening significantly increases a person's risk of being violently victimized (consistent with Ha). All of the relationships between the variables and differences in likelihood of being victimized are consistent with the results presented above. In sum, for this particular variable, the results are in line with the convergence hypothesis, since an interactive effect was not found (see Table 5.14).

Table 5.14 Logistic Regression measuring the interactive effects of gender by

going to bars, pubs or comedy clubs at night on violent victimization

oing to bars, pubs or	Model 1		Model 2		Model 3		Model 4	
	В	Odds	В	Odds	В	Odds	В	Odds
Gender								
Male	T -	1.00	-	1.00	-	1.00	-	1.00
Female	-0.71***	0.49	-0.66***	0.52	-0.66***	0.51	-0.72***	0.49
Age				· · · · · · · · · · · · · · · · · · ·				
15-24			-	1.00	-	1.00		
25-44			-0.33**	0.72	-0.34**	0.72		1
45+			-1.22***	0.30	-1.21***	0.30		1
Marital Status								
Single -			.=	1.00		1.00		<b></b>
Married			-0.80***	0.45	-0.80***	0.45		
Previously Married			-0.15	0.86	-0.15	0.86		1
Unknown	1		0.35	1.42	0.35	1.42		
Urban Indicator								
Yes			0.31**	1.36	0.31**	1.36		
No	1		-	1.00	-	1.00		
Previous Arrest		<u> </u>						1
Yes			1.54***	4.64	1.53***	4.63		1
No			-	1.00	-	1.00		
Education		<u> </u>						
University			-0.03	0.97	-0.03	0.97		
High School			-0.02	1.01	-0.02	1.02		
Less Than High School			-	1.00	-	1.00		
Unknown			0.52*	1.68	0.52*	1.68		
Visible Minority						-		
Yes			-0.30**	0.74	-0.30**	0.74		
No	1		-	1.00	-	1.00		
Household Income								
\$29,999 or Less			-	1.00	-	1.00		
\$30,000-\$49,999			-0.12	0.88	-0.12	0.88		
\$50,000- \$79,999		<del>                                     </del>	-0.01	0.99	-0.02	0.99		
\$80,000 or More	1		0.07	1.07	0.07	1.07		
Unknown			-0.27**	0.76	-0.27**	0.76		
Bars, Pubs, Comedy Clubs								
Yes	0.95***	2.60	0.24**	1.27	0.25*	1.29	0.94***	2.56
No	1-	1.00	•	1.00	-	1.00	-	1.00
Unknown	-0.15	0.86	-0.08	0.92	-0.08	0.92	-0.15	0.86
Gender x Bars, Pubs,	1	T			-0.05	0.95	0.06	1.06
Comedy Clubs								
Constant	-3.03***		-2.23***		-2.23***	1	-3.03***	1
Nagelkerke R-square	0.003***	<b>-</b>	0.010***	<b></b>	0.010***	<u> </u>	0.003***	1

Notes: N = 23,750; \*= p < .05; \*\* = p < .01; \*\*\* = p = .000

## 5.3.3.4 Sports, Recreational Activities, and Exercise in the Evening

### Model 1

As shown in Model 1 in Table 5.15, women are 52% less likely to be violently victimized when compared with males. Model 1 reveals that there are significant differences in likelihood of victimization between those who participate in sports, recreational activities, or exercise in the evening and those who do not. Those who do participate in these activities are 1.56 times more likely than those who do not to be victims of assault, robbery or attempted robbery. This Model accounts for a total of 3% of the variance and is significant at p=0.000.

#### Model 2

Model 2 (see Table 5.15) includes the variables from Model 1 along with the controls and the results remain to be consistent with the results presented above (further confirming victims tend to be young, white, single, males, living in urban areas, who have been previously arrested). Participating in sports, recreational activities, or exercising in the evening continues to be a predictor for violent victimization but the relationship has decreased in strength with the introduction of the controls (Model 1 versus Model 2). The Nagelkerke R-square is at 10% is significant at p=0.000.

#### Model 3

Model 3 includes those variables from Model 2 and introduces an interaction between sex and the independent variable of interest in this model (sports, recreational activities, exercise). The results remain fairly consistent with Model 2 (including the Nagelkerke R-square and chi-square statistics). The introduction of the interaction term renders no significant results.

### Model 4

Model 4 is consistent with Model 3. With the control variables omitted, there continues to be no significant interaction.

Overall, the results are consistent with the HA indicating that those who participate in sports, recreational activities, or exercise in the evening are at an increased risk of being violently victimized (consistent with HA). Similar to the results from the variables of interested presented above, most significant relationships are as expected. The combination of the dependent variable, controls, independent variable, and interaction term in Model 3 account for 10% of the variance at the p=0.000 level in the dependent variable. Again, since we fail to observe interactive evidence that individuals who participate in sports, recreational activities or exercise at night are particularly vulnerable to victimization based on gender, the results are in line with the convergence hypothesis.

Table 5.15 Logistic Regression measuring the interactive effects of gender by participating in sports, recreational activities or exercise at night on violent victimization

	Model 1		Model 2		Model 3		Model 4	
	В	Odds	В	Odds	В	Odds	В	Odds
Gender								
Male	-	1.00	-	1.00	-	1.00	-	1.00
Female	-0.72***	0.48	-0.66***	0.52	-0.66***	0.52	-0.70***	0.50
Age								1
15-24			-	1.00	-	1.00		<b></b>
25-44			-0.35**	0.72	-0.35**	0.71		
45+			-1.21***	0.30				
Marital Status								
Single			-	1.00	-	1.00		
Married			-0.81***	0.44	-0.81***	0.44		
Previously Married			-0.16	0.85	-0.16	0.85		<b></b>
Unknown			0.31	1.37	0.31	1.37		
Urban Indicator								
Yes			0.32**	1.37	0.32**	1.37		
No			-	1.00	-	1.00		
Previous Arrest								
Yes			1.57***	4.80	1.57***	4.80		
No				1.00	-	1.00		
Education								
University			-0.02	0.99	-0.02	0.99		
High School			0.04	1.04	0.04	1.04		
Less Than High School			-	1.00	-	1.00		
Unknown			0.58*	1.71	0.58*	1.71		
Visible Minority								
Yes			-0.29**	0.75	-0.29**	0.75		
No			-	1.00	-	1.00		
Household Income								
\$29,999 or Less			-	1.00	-	1.00		
\$30,000-\$49,999			-0.13	0.87	-0.13	0.87		
\$50,000- \$79,999			-0.03	0.97	-0.03	0.97		
\$80,000 or More			0.05	1.06	0.06	1.06		
Unknown			-0.28**	0.76	-0.28**	0.76		
Sports, Recreation, Exercise								
Yes	0.46***	1.56	0.17**	1.19	0.17*	1.18	0.49***	0.63
No	-	1.00	-	1.00	-	1.00	-	1.00
Unknown	-0.20	0.81	-0.13	0.87	-0.13	0.87	-0.20	0.81
Gender x Sports,					0.01	1.01	-0.08	0.93
Recreation, Exercise					1			
Constant	-3.11***		-2.28***		-2.28***		-3.13***	
Nagelkerke R-square	0.003***		0.010***		0.010***	<u> </u>	0.003***	

Notes: N = 23,750; \* = p < .05; \*\* = p < .01; \*\*\* = p = .000

# 5.3.3.5 Shopping (including Window Shopping) in the Evening

### Model 1

As shown in Table 5.16, women are 53% less likely than men to be victims of violence. This model accounts for only 2% of the variance in the likelihood of being

violently victimized and is significant at p=0.000. Model 1, as expected, reveals that there are significant differences between those who shop or go window shopping in the evening and those who do not; respondents who do shop in the evening are 1.2 times more likely to be victims of violence.

#### Model 2

Model 2 (see Table 5.16) includes the variables from Model 1 and introduces the control variables. This model once again confirms that victims are generally single, young, white, male, from urban areas, with records of previous arrest. An interesting finding here, however, is that the introduction of the control variables renders the independent variable (shopping) not significant. Thus, this model suggests that those who shop in the evening have similar victimization rates as those who do not shop in the evening, when controlling for age, marital status, urbanicity, minority status, income, previous arrest, and education. The combination of the variables in the model accounts for a total variance of 10% at p=0.000 in the dependent variable.

#### Model 3

Model 3 includes the variables from Model 2 and introduces the interaction term associated with the current variable of interest, shopping (incl. window shopping). The results remain consistent with Model 2 (including the Nagelkerke R-square and chi-square statistics), with introduction of the interaction term rendering no significant results.

#### Model 4

Model 4 represents the basic model (sex; shopping; and sex x shopping) and is different from Model 1 because shopping in the evening is no longer a predictor of

personal victimization. The model accounts for 3% of the variance and the introduction of the interaction term does not generate any statistical significance.

Overall, Models 1 through 4 which test the relationship between sex, violent victimization and shopping in the evening, generate different results when compared with the results outlined in the above sections. Here, the null hypothesis was supported because shopping is considered a significant predictor of victimization in Model 1 only, and the significance disappeared with the introduction of the control. Although this is true, the results continue to be in line with the convergence hypothesis since the interaction terms rendered no significant results<sup>9</sup>.

<sup>&</sup>lt;sup>9</sup> The combination of the dependent variable, controls, independent variable, and interaction term in Model 3 accounts for 11% of the variance at the p=0.000 level in the dependent variable.

Table 5.16 Logistic Regression measuring the interactive effects of gender by shopping (including window shopping) at night on violent victimization

	Model 1		Model 2		Model 3		Model 4	
	В	Odds	В	Odds	В	Odds	В	Odds
Gender								
Male	-	1.00	-	1.00	_	1.00	_	1.00
Female	-0.76***	0.47	-0.67***	0.51	-0.72***	0.49	-0.82***	0.44
Age								
15-24			-	1.00	-	1.00		
25-44			-0.36**	0.70	-0.36**	0.70		
45+			-1.24***	0.29	-1.23***	0.29		
Marital Status								
Single			-	1.00	-	1.00		
Married			-0.82***	0.44	-0.82***	0.44		
Previously Married		1	-0.16	0.85	-0.16	0.85		
Unknown			0.33	1.39	0.32	1.38		
Urban Indicator								
Yes			0.31**	1.36	0.31**	1.37		
No			-	1.00	-	1.00		
Previous Arrest								
Yes			1.56***	4.74	1.56***	4.76		
No			-	1.00	_	1.00		
Education								
University			-0.01	0.99	-0.00	1.00		
High School			0.05	1.04	0.05	1.05		
Less Than High School			-	1.00	-	1.00		
Unknown			0.53*	1.71	0.54*	1.72		
Visible Minority								
Yes			-0.31**	0.74	-0.30**	0.74		
No			-	1.00	-	1.00		
Household Income								
\$29,999 or Less			-	1.00	-	1.00		
\$30,000-\$49,999			-0.12	0.88	-0.12	0.88		
\$50,000- \$79,999			-0.01	0.99	-0.02	0.98		
\$80,000 or More			0.08	1.06	0.08	1.08		
Unknown			-0.27**	0.76	-0.27**	0.76		
Shopping (Incl. Window)								
Yes	0.19**	1.21	0.05	1.06	-0.05	0.95	0.04	1.04
No	-	1.00	-	1.00	-	1.00	-	1.00
Unknown	-0.10	0.90	0.01	1.00	0.00	1.00	-0.10	0.90
Gender x Shopping (Incl.					0.24	1.27	0.36	1.43
Window)								
Constant	-2.28***		-2.21***		-2.19***		-2.95***	
Nagelkerke R-square	0.002***		0.010***		0.010***		0.003***	ļ.

Notes: N = 23,750; \* = p < .05; \*\* = p < .01; \*\*\* p = .000

# 5.3.4 Violent Victimization and Alcohol Consumption

As discussed in Chapter 4, two separate measures of alcohol consumption are utilized for the purpose of this study: general alcohol consumption (i.e. do you drink?) and binge drinking (i.e. drinking 5 or more alcoholic beverages in one evening). Each of

the 4 regression models computed for these two independent variables are presented below and in Table 5.17 and Table 5.18.

## 5.3.4.1 Alcohol Consumption

#### Model 1

As shown in Table 5.17, the results are consistent with those presented above in that females were 52% less likely than males to be victimized. Model 1 reveals that there are significant differences between those who drink alcoholic beverages and those who do not; those that do are 1.2 times more likely to be victims of robbery, attempted robbery, or assault. This Model accounts for a total of 4% of the variance and is significant at p=0.000.

### Model 2

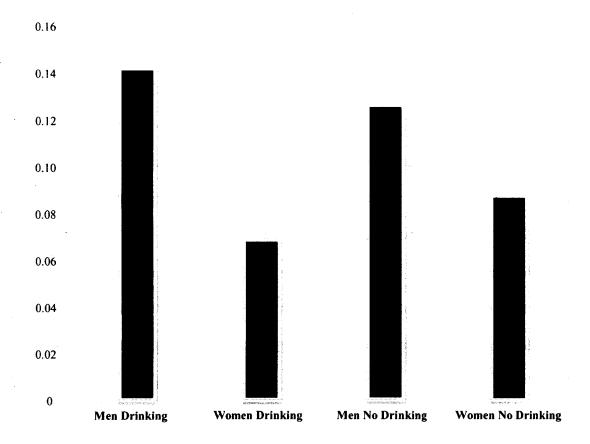
Model 2 (see Table 5.17) introduces the controls, and further confirms that young, white, single, males, living in urban areas, who have been previously arrested, are significantly more likely to be victimized than their older, non-white, female counterparts who reside in rural areas and do not have a record of prior arrest. Drinking alcohol continues to be a strong predictor for violent victimization, and remains consistent with Model 1.

### Model 3

The interaction of sex and alcohol consumption, along with the variables included in Model 2, are included in Model 3 and the Nagelkerke R-square was consistent with Model 2 at 11%. In this model, the interaction term is significant indicating that women who drink are less likely to be victimized than men who drink. Figure 5.1 demonstrates

the predicted probabilities associated with the interaction between sex and alcohol consumption.

Figure 5.1 Predicted Probabilities: The Interaction Between Sex and Alcohol Consumption



As is evident from the graph, men and women who do not drink are more similar to one another than are men and women who do drink. In this case, drinking is worse for men resulting in an increased probability of violent victimization for men who drink. Also interesting to note, is that when compared with women who do not drink, women who do drink are less likely to be victimized. This indicates that some chivalrous treatment of intoxicated women occurs, and that people may watch out for women who drink.

### Model 4

Model 4 (Table 5.17) is a presentation of the basic model (sex, alcohol consumption and sex x alcohol consumption) and is consistent with Model 1 (including the Nagelkerke R-square at 4%), showing that females drink are more likely than females who do not to be victimized. Consistent with Model 3, the simple model confirms that there is a significant interaction between sex and alcohol consumption, which is in line with the chivalry hypothesis.

Overall, as expected, drinking increases ones likelihood of being violently victimized (consistent with Ha). The combination of the dependent variable, controls, independent variable, and interaction term in Model 3 accounts for 11% of the variance at the p=0.000 level in the dependent variable. Similar to the relationships described throughout this Chapter, and as is to be expected, there exists significant relationships between many of the controls and the dependent variable. In this case, the interaction between sex and the independent variable (alcohol consumption) is significant and is in line with the chivalry hypothesis.

Table 5.17 Logistic Regression measuring the interactive effects of gender by

alcohol consumption on violent victimization

	Mod	el 1	Model 2		Model 3		Model 4	
	В	Odds	В	Odds	В	Odds	В	Odds
Gender								
Male	-	1.00	-	1.00	-	1.00	-	1.00
Female	-0.74	0.48	-0.68***	0.51	-0.41**	0.66	-0.52***	0.60
Age								
15-24		1	-	1.00	-	1.00	1	1
25-44			-0.36**	0.70	-0.37**	0.69		1
45+			-1.25***	0.29	-1.26***	0.28		
Marital Status								
Single			-	1.00	-	1.00		
Married			-0.82***	0.44	-0.83***	0.44		
Previously Married		1	-0.17	0.85	-0.17	0.84	<u> </u>	
Unknown		1	0.40	1.49	0.37	1.45		
Urban Indicator		†		1111		-		1
Yes			0.31**	1.37	0.32**	1.37		†
No		1	-	1.00	_	1.00		
Previous Arrest				1.00		1		†
Yes		†	1.57***	4.79	1.55***	4.72		1
No		1	-	1.00	-	1.00		<del> </del>
Education		1		1		1100		<b>†</b>
University	<del></del>		0.00	1.00	0.01	1.00		
High School		<u> </u>	0.05	1.06	0.05	1.05		1
Less Than High School	<u> </u>	<u> </u>	-	1.00	_	1.00		
Unknown			0.85**	2.34	0.85**	2.33		1
Visible Minority		1						1
Yes			-0.32**	0.73	-0.32**	0.73		
No		†	_	1.00	_	1.00		
Household Income								
\$29,999 or Less			t <u>-</u>	1.00	-	1.00		<u> </u>
\$30,000-\$49,999			-0.12	0.89	-0.12	0.89		†
\$50,000- \$79,999		<del> </del>	-0.01	0.99	-0.01	0.99		
\$80,000 or More			0.09	1.09	0.09	1.09		1
Unknown			-0.26**	0.77	-0.26**	0.77		<u> </u>
Consume Alcohol								<del> </del>
Yes	0.15**	1.17	0.16	1.18	0.14	1.15	0.30**	1.35
No	-	1.00	-	1.00	-	1.00	-	1.00
Unknown	-0.14	0.87	-0.58	0.56	-0.54	0.59	-0.11	0.90
Gender x Consume Alcohol				1	-0.40**	0.67	-0.33**	0.72
Constant	-3.06***		-2.19***	<u> </u>	-2.31***	1	-3.17***	
Nagelkerke R-square	0.004***	1	0.011***		0.011***	1	0.004***	

Notes: N = 23,750; \* = p < .05; \*\* = p < .01; \*\*\* p = .000

# 5.3.4.2 Binge Drinking (5+ Drinks in One Evening)

## Model 1

Model 1 in Table 5.18 shows that females are 46% less likely than males to be violently victimized, which is generally consistent with the results presented thus far.

This model also reveals that those who binge drink are 2.35 times more likely to be

victimized than those who do not binge drink. This Model accounts for a total of 2% of the variance and is significant at p=0.000.

#### Model 2

Model 2 as shown in Table 5.18 includes the dependent variable, control variables, and the variable of interest which is binge drinking. This model further supports the results previously outlined in this chapter by confirming that older, married, females, who are visible minorities with no record of arrest and live in rural areas are significantly less likely to be victimized than are younger, single, white, males with records of previous arrest who live in urban areas. Binge drinking continues to be a strong predictor for violent victimization, though the odds ratio has decreased from 2.35 to 1.49. The Nagelkerke R-square is at 10% and is significant at p=0.000.

#### Model 3

The interaction of sex and binge drinking, along with the variables included in Model 2, were included in Model 3. This model accounts for 11% of the variance and is significant at p=0.000. Similar to Model 3 presented above for alcohol consumption, this model indicates that there is a significant interaction between sex and binge drinking in predicting violent victimization. The predicted probabilities associated with the interaction between sex and binge drinking is depicted in graphic form in Figure 5.2.

Figure 5.2 Predicted Probabilities: The Interaction Between Sex and Binge

Drinking

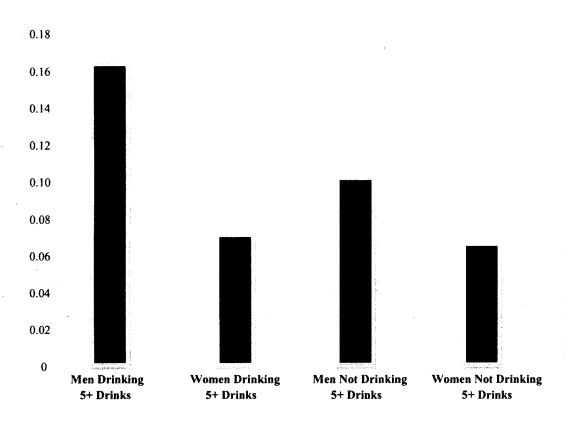


Figure 5.2 demonstrates that men and women who do not binge drink are more similar than men and women who do, in fact, binge drink. As can be seen above, binge drinking is far worse for men resulting in an increased probability of violent victimization for men who binge drink over women who binge drink (in line with the chivalry hypothesis). Interesting to note, however, is that this result is mixed with the 'evil women' hypothesis because it appears that women who binge drink are slightly more likely to be victimized than women who do not binge drink.

## Model 4

Model 4 includes sex, binge drinking, and the interaction between sex and binge drinking. This model is consistent with Model 3, indicating that there is an interaction

between sex and binge drinking, showing that men who binge drink are more likely to be victimized than are women who binge drink.

Overall, as expected, binge drinking increases the likelihood that an individual will be victimized (consistent with HA). The combination of the dependent variable, controls, independent variable, and interaction term in Model 3 accounts for 11% of the variance at the p=0.000 level in the dependent variable. The results presented throughout these 4 models are consistent with the results described throughout the Chapter, with the exception of the interaction term which shows a significant relationship. This significant interaction is in line with both the chivalry and 'evil women' hypotheses, indicating that women who binge drink are less likely than men who binge drink to be violently victimized, but that women who binge drink are slightly more likely than women who do not to be victimized.

Table 5.18 Logistic Regression measuring the interactive effects of gender by binge drinking (drinking 5 or more alcoholic drinks in one evening) on violent victimization

	Model 1		Model 2		Model 3		Model 4	
	В	Odds	В	Odds	В	Odds	В	Odds
Gender				]				
Male	] -	1.00	-	1.00	-	1.00	-	1.00
Female	-0.62***	0.54	-0.63***	0.53	-0.48***	0.62	-0.51***	0.60
Age			ī					
15-24	1		-	1.00	-	1.00		
25-44			-0.33**	0.72	-0.34**	0.71		
45+			-1.16***	0.31	-1.19***	0.31		
Marital Status				1	1			
Single			-	1.00	-	1.00		
Married	1		-0.79***	0.45	-0.79***	0.45		
Previously Married			-0.15	0.86	-0.16	0.85		
Unknown			0.33	1.39	0.31	1.37		
Urban Indicator				· · · · ·	T			
Yes			0.32**	1.38	0.32**	1.38		
No			-	1.00	-	1.00		
Previous Arrest				1				
Yes			1.53***	4.61	1.52***	4.57		
No			-	1.00		1.00		
Education				1,100	1			
University			0.02	1.02	0.03	1.03	<u> </u>	
High School	<u> </u>		0.03	1.04	0.04	1.04		
Less Than High School			-	1.00	_	1.00		
Unknown			0.52*	1.69	0.54*	1.71		
Visible Minority			1	107	0.5 1			
Yes			-0.27**	0.76	-0.27**	0.76		<u> </u>
No			-	1.00	-	1.00		<b></b>
Household Income				1.00		1.00	<b>.</b>	<u> </u>
\$29,999 or Less			_	1.00	1_	1.00		
\$30,000-\$49,999	1	<u> </u>	-0.12	0.88	-0.13	0.88		
\$50,000-\$79,999			-0.01	0.99	-0.03	0.97		
\$80,000 or More	1		0.08	1.08	0.06	1.06		
Unknown		<del> </del>	-0.26**	0.77	-0.26	0.77	<u> </u>	<del>                                     </del>
Binge Drink	1		·	1,	V.=0	J.,,		<u> </u>
Yes	0.85***	2.35	0.40***	1.49	0.55***	1.73	0.97***	2.60
No	- 0.05	1.00	† <u></u>	1.00		1.00		1.00
Unknown	0.22**	1.25	0.21**	1.23	0.19**	1.21	0.22**	1.24
Gender x Binge Drink	U.LL	1.25	0.21	† ••••	-0.47**	0.63	-0.34**	0.72
Constant	-3.35***	<del>                                     </del>	-2.49***	<del> </del>	-2.55***	0.03	-3.40***	0.72
Nagelkerke R-square	0.002***		0.010***	<u> </u>	0.011***	<b>-</b>	0.003***	

Notes: N = 23,750; \* = p < .05; \*\* = p < .01

## 5.3.5 Summary of Models

Overall, the models presented for each of the 9 independent variables are similar to the Basic Model as outlined in Table 5.9. In all cases, Model 3 accounts for approximately 10-11% of the total variance in the likelihood of being violently victimized. Overall, HA is supported showing that those who engage in risky lifestyle

activities will be more likely to be victimized than those who do not. The one exception here is with regards to shopping in the evening which generates a non-significant relationship with the dependent variable, thus supporting the null hypothesis (H<sub>0</sub>).

I tested all possible gender interaction effects that significantly influence the likelihood of violent victimization. For 7 or the 9 independent variables, no significant interactions are found indicating that – in regards to these variables, this the context – the results are in line with the convergence hypothesis. That is, we failed to observe interactive evidence that individuals who partake in these activities at night are particularly likely to be victimized based on their gender.

The exception here was with regards to the 2 variables related to alcohol consumption, where significant interactive are found across models. As seen in Figure 5.1, women who drink are less likely than both men who drink and women who do not drink to be victimized. In this case, the results are in line with the chivalry hypothesis. As seen in 5.2, women who binge drink are less likely to be victimized than are men who binge drink, but are more likely than women who do not binge drink to be victimized. In this case, the results are mixed and are in line with both the chivalry and 'evil women' hypotheses.

These results are discussed further in Chapter 6.

#### **CHAPTER 6**

#### **DISCUSSION AND CONCLUSIONS**

### 6.1 INTRODUCTION

The first section of this chapter provides a brief summary of the empirical findings. The next section provides a discussion of these findings alongside the literature reviewed in Chapter 2 and Chapter 3. In the following sections, the implications of these findings for policy and for sociological inquiry in the area of gender, risky lifestyle behaviours and violent victimization, as well as the limitations of both the methodology and the findings, will be discussed. In the final section, recommendations for future research will be provided.

### 6.2 SUMMARY OF FINDINGS

The main objective of this study was to assess the relationship between gender and risky lifestyle behaviours in predicting violent victimization. I predicted that routine activities and risky lifestyle behaviours would have an impact on violent victimization and studied the role that gender plays in this relationship using three competing hypotheses: the convergence hypothesis, the 'evil woman' hypothesis, and the chivalry hypothesis. The key findings of this thesis are as follows:

## 6.2.1 Routine activities and Risky Lifestyles

Routine activities impact an individual's likelihood of experiencing violent victimization.

Further, those who participate in risky activities and engage in risky lifestyles are significantly more likely than those who do not to be victims of violence. This was consistent across all but 1 of the independent variables analyzed. More specifically:

- Walking alone at night increases ones likelihood of being violently victimized.
- Utilizing public transit at night increases ones likelihood of being violently victimized.
- c. Working, attending classes or meetings, or volunteering in the evening increases ones likelihood of being violently victimized.
- d. Going to restaurants, movies, or the theatre in the evening increases ones likelihood of being violently victimized.
- e. Going to bars, pubs, or comedy clubs in the evening significantly increases ones likelihood of being violently victimized.
- f. Participating in sports, recreational activities, or exercise in the evening increases ones likelihood of being violently victimized.
- g. Drinking increases ones likelihood of being violently victimized.
- h. Binge drinking increases ones likelihood of being violently victimized.

The notable exception lacking support of the routine activities theory is with regard to

shopping in the evening, which does not increase ones likelihood of being victimized.

### 6.2.1.1 Gender, Routine Activities and Violent Victimization

With the exception of alcohol consumption (drinking in general, and binge drinking), the

results are generally in line with the convergence hypothesis. More specifically:

a. We failed to observe interactive evidence that individuals who walk alone
 at night are particularly likely to be victimized based on their gender.

- b. We failed to observe interactive evidence that individuals who utilize public transit at night are particularly likely to be victimized based on their gender.
- c. We failed to observe interactive evidence that individuals who work, attend class or meetings, or volunteer at night are particularly likely to be victimized based on their gender.
- d. We failed to observe interactive evidence that individuals who go to restaurants, movies or the theatre at night are particularly likely to be victimized based on their gender.
- e. We failed to observe interactive evidence that individuals who go to bars, pubs or comedy clubs at night are particularly likely to be victimized based on gender.
- f. We failed to observe interactive evidence that individuals who participate in sports, recreational activities, or exercise at night are particularly likely to be victimized based on gender.
- g. We failed to observe interactive evidence that individuals who shop (including window shop) at night are particularly likely to be victimized based on gender.

The notable exception here is with regards to the two variables related to alcohol consumption. In terms of drinking – in general – the results are in line with the chivalry hypothesis indicating that women who drink are less likely to be victimized than are both men and women who do not drink. In terms of binge drinking, however, the results are mixed, and are in line with both the chivalry and 'evil women' hypotheses indicating that

women who binge drink are less likely to be victimized than are men who binge drink, but are more likely to be victimized than women who do not binge drink.

Thus, the principal finding in this study is that individuals who participate in risky lifestyles – in particular, utilizing risky nighttime modes of transportation at night or participating in activities outside the home at night – are at a heightened risk of victimization, regardless of gender. Men who drink, however, are at a heightened risk of being violently victimized when compared with women who drink or binge drink, suggesting a form of chivalry may be involved in protecting drinking women.

### 6.3 IMPLICATIONS OF FINDINGS

## 6.3.1 Implications for Policy

It is much easier to change the behaviour of potential victims than to change offenders and their behaviours. The finding that, generally speaking, men and women who converge in time and space (i.e. have similar routine activities and lifestyles) share similar risks of violent victimization, has several implications for social policy. Since individuals that partake in more risky lifestyles are at a heightened risk of victimization, it is foreseeable, then, that policy aimed at increasing guardianship, decreasing exposure, or decreasing target suitability are important avenues of social policy.

Individuals who spend time outside of the house at night (for example, who walk home alone at night, who go to bars at night, who go to restaurants at night, who work at night, etc) are more likely to be victimized than those who do not spend time outside of the house at night – regardless of gender. Past research has also proven this. Given that the dependent variable in this analysis – violent victimization – included assault, robbery

and attempted robbery, policy aimed at combating these forms of victimization (along with others) is needed.

It is important to increase guardianship – and situational crime prevention lends support to this argument. Community control is necessary to do this. Programs and policies aimed at strengthening and building community – such as neighbourhood watch – are important as this provides potential victims with a heightened form of guardianship that does not presently exist. In addition, community policing would be a worthwhile endeavour. Another way to ensure increased guardianship is to educate young people on the importance of travelling with a partner or a group of peers, particularly at night. This would also provide increased/heightened levels of guardianship.

Secondly, it is important to decrease exposure. Though people will continue to spend time outside of the home at night, this could include things such as proper lighting and more accessible and safe transit options.

Decreasing target attractiveness could include many things. Education on the importance of engaging in nighttime activities alongside friends or partners is important — this not only increases guardianship but decreases target attractiveness. For example, someone would be more prone to rob someone (find them attractive as a target) if they were alone than if they were with a group of people.

### 6.3.2 Implications for Sociological Inquiry

Several researchers, concerned with the link between routine activities and violent victimization, have speculated that males (despite their lifestyle choices) are at a heightened risk of violent victimization (as identified in this study). To our knowledge, this thesis is the first quantitative study, based on Canadian data, to assess this issue. Our

analysis provided more empirical evidence that there does, indeed, exist a significant relationship between lifestyle choices and violent victimization (primarily assault, robbery and attempted robbery as this is what constituted victimization in this study). Thus, routine activities theory and lifestyle theory continue to be upheld as viable theories of criminology and victimology.

## 6.3.2.1 Routine Activities and Violent Victimization

As previously noted in Chapter 2, we were interested in examining the relationship between risky lifestyles and violent victimization utilizing Canadian data.

As seen in Chapter 5, the results of the multivariate analysis demonstrated that regardless of the inclusion of control variables, individuals that participate in high-risk lifestyles including risky nighttime activities, risky modes of nighttime transportation, and alcohol consumption, were more likely than those who did not partake in these activities to be victims of assault, robbery, or attempted robbery. This finding is consistent with the literature presented in Chapter 2, showing that certain types of routine activities – particularly those that take place at nighttime, outside of the house – were conducive to violent victimization (Lasley 1989; Messner and Tardiff 1985; Miethe et al 1987; Miethe et al 1990; Eisner 2002; Finkelhor and Asdigian 1996; Hough 1987; Sampson and Wooldredge 1987; Massey, Krohn, and Bonati 1989, Kennedy and Forde 1991).

# 6.3.2.2 Gender, Risky Lifestyles and Violent Victimization

This study was unique among previous empirical studies of routine activities theory, particularly in Canada, in that it analyzed the impact that gender has on the relationship between risky lifestyle choices and vulnerability to violent victimization; it

variable. Consequently, we were able to assess the role that gender plays – if any – when testing the relationship between routine activities and violence. <sup>10</sup> The introduction of this variable to the analysis resulted in several interesting findings.

As discussed in Chapter 3, three emerging gendered-theory approaches were examined: the chivalry hypothesis, the 'evil woman' hypothesis and the convergence hypothesis. The chivalry hypothesis suggested that women are normally protected from harm and are often treated less harshly than men. Offenders, who are mostly males, are more reluctant to assault a woman than to assault a man and partake in "doing gender" by acting in a chivalrous manner toward women. For example, an agitated man might punch another man who insulted him at a bar, but might stay calm if a woman insulted him. Not all offenders, however, are chivalrous, but the argument here is that some might be. The 'evil woman' hypothesis, on the other hand, predicted the exact opposite; women who break gender roles may be at an increased risk of harm than their role-abiding female counterparts. For example, an offender may be more likely to harm a drunken woman than a sober woman, because she is acting in an unladylike fashion, and thus is not "doing gender" correctly. Lastly, with the regard to the convergence hypothesis, this approach contends that men's and women's lifestyles are changing and are converging, and thus their rates of victimization are prone to also converge. For example, an offender may be just as likely to assault a woman as he is to assault a man who he sees walking

<sup>&</sup>lt;sup>10</sup> The results of the Binary Logistic Regression analyses (see Chapter 5) demonstrated that an individual's lifestyle does, in fact, have an impact on victimization. While the control variables were included in the analysis, it is not necessary to provide a detailed discussion of them because they were only included to show that the results and findings were maintained when they were included.

alone at night because that individual would be considered a suitable target, who lacks guardianship (i.e. despite his/her gender).

Also seen in Chapter 3, is that generally speaking, males are most susceptible to violent victimization and are also more likely to engage in risky lifestyle activities For example, Forde and Kennedy (1997) indicated that since men participated in imprudent behaviour more often than women, they were more vulnerable to violent victimization. In addition, Forde and Kennedy pointed out that men were significantly more likely than women to report engaging in riskier lifestyle behaviours, including criminal activities. But what if women who participated in these types of behaviours were compared with men? Would they still be at a decreased risk of violent victimization?

As seen in Chapter 5, the findings were primarily in line with the convergence hypothesis. Further, since no interactive evidence was found between gender and 7 of the 9 measures of risky lifestyles activities, the results indicate that participating in these types of behaviours increase one's likelihood of being victimized, despite gender. This is in line with numerous studies that show that as men's and women's roles and lifestyles become more alike, so do their lifestyles (Bloomfield et al 2001; Cullen and Agnew 2007; Adler 1975; Wilsnack et al 2000; etc). Thus, engaging in risky routine activities is neither worse for men of for women; it is equally detrimental for both genders. Offenders are neither chivalrous, nor looking out for evil women. Instead, they are opportunists who victimize any individuals who engage in risky routine activities and do not care if they are male or female. Here, criminal opportunity appears to be more important than gender.

Thus, our results clearly indicate that individuals with high-risk lifestyles are increasingly prone to violent victimization. Moreover, our results demonstrated that when

gender is included as an interactive effect, for the most part, these rates of violent victimization appear to converge. That is, the results of this study are generally in line with the convergence hypothesis, indicating that both women and men who partake in risky lifestyle activities — with the exception of alcohol consumption and binge drinking — are at an increased likelihood of being victimized when compared respectively with women or men who do not partake in risky lifestyle activities. It is important to note that this thesis is not suggesting that gender convergence applies to all facets of society, but it might apply to the selection of vulnerable victims by violent offenders. It is also important to note that men and women may be exposed to different risks of victimization, and that individuals engage in risky routine activities do have higher rates of victimization, but that these two phenomena are additive effects and not interactive effects.

The exception to this finding is with regards to alcohol consumption.

# 6.3.2.3 Gender and Alcohol Consumption

As seen in Chapter 2 and Chapter 3, alcohol consumption puts people at an increased risk of violent victimization (Lasley 1989; Auerhahn and Parker, 1999; Collins, 1981; and Collins and Messerschmidt, 1993; Dansky et al., 1997; Lasley, 1989; Miczek et al., 1994; Mustaine and Tewksbury, 1998; Slade et al., 1997; Testa and Parks, 1996; Ullman, 2003). This is mainly because an increase in alcohol consumption – especially out-of-home alcohol consumption – is viewed as victimogenic because it places individuals in situations where they are exposed to more crime (dangerous persons and dangerous places) (Felson and Burchfield 2004).

As discussed on Chapters 4 and 5, two separate measures of alcohol consumption are utilized in this study: drinking (in general) and binge drinking (drinking more than 5 drinks in one evening). In this case, when analyzing the relationship between gender and alcohol consumption on predicting violent victimization, an interesting result occurred.

As seen in Chapter 5, women who drink – in general – are significantly less likely than both men who drink, and women who do not drink, to be victims of violence. This finding is different from those of the other nighttime activities because it was in line with the chivalry hypothesis.

As discussed in Chapter 3, the chivalry hypothesis contends that any form of harm against women is seen as more detrimental than harm against men. In addition, violence against women is seen as more serious because it, potentially, causes more harm than does violence against men (Murphy and O'Leary 1989). Thus, our results indicate that women who drink – in general – are protected from harm (by society, by others, by men).

Also, as seen in Chapter 5, women who binge drink are significantly less likely than men who binge drink to be victimized. Interesting to note here, however, is that women who binge drink are slightly more likely than women who do not binge drink to be victims of violence. These results provide mixed support that is in line with both the chivalry hypothesis and the 'evil woman' hypothesis.

As discussed in Chapter 3, the 'evil woman' hypothesis contends that those who do not accurately "do gender" will be treated more harshly than women (and men) who do, in fact, "do gender". Thus, our results indicate that women who binge drink are treated more harshly than are women who do not binge drink, suggesting that they are being punished for not accurately "doing gender" (see Nagel and Hagan 1983; Crew

1991; Erez 1992; Harris 1977; Harris and Hill 1982; Phillips and DeFleur 1982; Visher 1983). When compared with men who binge drink, however, women are still significantly less likely to be victimized, suggesting that some chivalry is still ensued. In general then, for binge drinking, there is mixed evidence that is in line with both the chivalry and 'evil woman' hypotheses.

An alternate explanation for men being at a heightened risk of violence when they drink – or when they binge drink – could be that intoxicated men are at a greater risk of violent victimization – not because of their gender – but because they are increasingly likely to engage in provocative behaviour when they consume alcohol. For example, it is possible that men are more likely than women to engage in verbal aggression when under the influence, and therefore they may be more likely than women to provoke others to use physical violence (Wells et al. 2000).

Also important to note, is that while drunken women have a lower risk of physical assault and robbery when compared with drunken men, they are at a much higher risk of sexual assault – a risk that most men do not experience. Due to the nature of this thesis, sexual assault was not included in the creation of the dependent variable, since it is a phenomenon experienced overwhelmingly by women.

#### 6.4 LIMITATIONS OF THE STUDY

#### 6.4.1 Limitations of the Data

There are 2 main types of limitations identified with the data collected by

Statistics Canada in Cycle 18 of the General Social Survey on Victimization: sampling

errors and measurement errors. These will be discussed in this section. In addition, the limitations associated with utilizing secondary data for this thesis will be discussed.

## 6.4.1.1 Sampling Errors

The data collected by Statistics Canada are subject to sampling error. Sampling error occurs when there is a difference between a study sample, and the data that would have been collected from a census that used the same method to collect data from every person in the population (Statistics Canada 2004). Incarcerated individuals, the homeless and those without telephones (i.e. these could be poor people who are not homeless but who cannot afford a phone, or these could be young people who tend to rely on cellular telephones) were not included in the sample. In addition, Canadians residing in the territories (i.e. outside of the 10 provinces) were not included in the sample. Another group of individuals that need to be considered are those who refuse to participate in the survey even when they are contacted. Although Statistics Canada generally has a high response rate to their national surveys, there are also always those who do not want to participate.

There are implications for the exclusion of these people mainly in terms of generalizability. The results of these analyses cannot be generalized to the entire Canadian population; rather, they can only be generalized to those living in the 10 provinces, who are not incarcerated, who do not live on-reserve, who utilize telephones, and who (would) chose to participate when approached.

### 6.4.1.2 Measurement Errors

There is also the possibility of measurement errors. Measurement errors refer to issues such as a person's inability to accurately remember events and data management

errors (errors in coding, for example) (Statistics Canada 2004). The first issue – a person's inability to accurately remember events – is the result of surveys that rely on self-reporting. There are many cases where victimization will be over-reported due to an individual's misinterpretation of events or of what constitutes a criminal act. For example, one individual may report being assaulted if they were involved in an altercation at a bar, while another individual may not.

On the other hand, under reporting can become a problem due to embarrassment, fear of getting in trouble, or because an individual has forgotten about the incident. For example, someone who is assaulted may be embarrassed and may not report the incident, or, may not report the incident because he/she has merely forgotten about it.

Lastly, it is important to identify the potential for inaccurate responses due to respondents who exaggerate, or who are untruthful in their responses (Siegel and McCormick 2007). Secondly, data management errors are bound to occur due to simple human error. Though this is a limitation and thus it is important that it be identified, it is inevitable and cannot be controlled for.

# 6.4.1.3 Utilizing Secondary Data

The analysis of this thesis relies on secondary data that were not explicitly collected for the purposes of this study; therefore, it is difficult to obtain precise operational definitions of variables. The measurement of routine activities was itself problematic. The analyses in this thesis utilized all of variables included that could be attributed to risky to routine activities and risky lifestyles. Further, the types of risky routine activities that were included in the survey were limited. There was no information regarding homelessness, drug addiction, gang affiliation, prostitution, and so on. For

example, a better measure of the 'evil woman' concept may be a woman who is involved in the sex-trade, the drug trade, or who dates multiple men at the same time. That is, this woman would be considered much more "evil" than a woman who goes out at night with friends as a form of entertainment. In short, we have "softer" measures of risky lifestyles.

In addition, the GSS did not permit a precise measurement of all violent victimizations incurred in the 12 months preceding the interview. This variable was dummy coded with respondents who had been victims of assault, robbery, or attempted robbery coded as one. The GSS asked respondents what their main, or most serious, incident of victimization was in the 12 months preceding the interview and thus some incidents of victimization may have been lost (i.e. those who experienced more than one form/incident of victimization).

Another limitation concerns the small sample size of victims. In order to ensure a sufficient number of cases were included for analysis, those who were victimized (robbed/attempted robbery or assaulted) were grouped in the same variable under the same category (victim versus non-victim). In order to ensure a sufficient number of cases in each category of a variable and to reduce the number of dummy predictors, a number of variables were collapsed (see Chapter 4). Unfortunately, some valuable information may have been lost in the process. For example, marital status was collapsed into three categories: currently married (including common-law); previously married (widowed, divorced or separated); and single (never married). The first category is problematic because the experiences of married individuals are likely distinct from the experiences of individuals living in common-law unions. The same reasoning is applicable to the previously married category.

Important to note, is that although there are a number of potential limitations to victimization surveys, the positive attributes and potential usage of them far outweighs the limitations. With consistent revisions and improvements, national victimization surveys – such as the GSS Victimization Survey – will continue to be reliable tools for criminologists and victimologists in the future.

### 6.4.2 Falsification

The main substantive limitation is that the analyses conducted in this thesis can only suggest patterns that emerge and that are more or less in line with the three theoretical approaches – chivalry, 'evil woman', and convergence. This thesis is not, however, a formal test of any of these theoretical approaches. Though the results are informative, no falsification is possible.

#### 6.4.3 Gender

The treatment of gender in this study is also a limitation. The only information we have on one's gender is the dataset used is the Sex variable (i.e. whether one considers him/herself male or female, or whether or not the interviewer assumed that an individual was male or female). Since much of our analyses and discussion is based on the importance of "doing gender", assumptions about roles, behaviours and attitudes must be inferred.

#### 6.5 RESEARCH DIRECTIONS

The limitations discussed in the previous section of this study lead to implications for future research. These include:

- 1. Methodological considerations
- 2. Theoretical considerations

- 3. Proper assessment of what constitutes gender
- 4. Considerations for the Convergence Hypothesis
- 5. Interplay between race, class and gender
- 6. Replication of study in other countries

## 6.5.1 Methodological Considerations

In future research, there are methodological considerations that criminologists and sociologists much take into account. There is a need to address methodological considerations while conducting future research in this area. For example, the type of regression analysis that is performed is critical in understanding and determining how variance is accounting for in each type of analysis. Also important is the need for a life history approach or a longitudinal study to assess the impact of risky lifestyles over time.

In addition, it is important to include qualitative studies in the area. Here, it is important to ask open-ended questions to allow for elaboration. This could be used in conjunction with other data sources to gain a better, more personal, understanding of the relationship between routine activities, victimization and gender. Another potential avenue for research would be with regard to conducting focus groups. These could be used to explore topics and questions that would involve more people at any given time. In addition, these focus groups could be based on gender, and comparative analyses could be conducted. Although qualitative research cannot be generalized, it is essential for theoretical refinement, testing and revision.

This area of inquiry would benefit from the use of clear and consistent definitions of routine activities, risky lifestyles, violent victimization, and gender as these definitions would enable researchers to compare findings and replicate analyses and results.

Researchers aiming to further explore the relationship between gender, risky lifestyles and violent victimization should utilize better measures of risky lifestyles and routine activities alongside other sociodemographic variables. This may involve expanding the measurements of risky lifestyles and may include the development of an inventory and scale to assess level of risk based on an expanded selection of routine activities For example, this could include such things as drug use and abuse, breaking house rules, time of night out, delinquent peers, and so on. There is a need for crude measures of target attractiveness, proximity to crime, exposure and guardianship. In addition, it is important that the context people live or work in, along with measures of distinct personal activities, are included.

As a final note, researchers interested in taking part in this area of study should ensure that they include proper measures and definitions of victimization since different people may perceive the same event differently (i.e. one will report being victimized if they were in a bar fight, while another will not). For example, instead of asking whether or not someone had been physically assaulted, the researchers may ask whether or not they have been punched, hit, kicked, slapped in the past 12 months. In addition, different forms of victimization should be utilized and compared (such as physical assault, verbal assault, robbery, etc).

### 6.5.2 Theoretical Considerations

The findings of this study provided mixed results with regard to the applicability of our three gender-based approaches when studying the link between risky lifestyle behaviours and violent victimization. The fact is that all three gender-based approaches (chivalry, 'evil woman' and convergence) could, in certain instances, be combined – that

is, the 3 approaches are not entirely contradictory and all imply some form of "doing gender". For example, the gender roles for men and women may be converging, but it is nonetheless the case that women who conform to gender roles may be more likely to earn protection, while those who deviate do not. Thus, more research is needed to discover and unhinge what is going on, and to examine whether or not this synthesized hypothesis has any truth to it.

Here, it is also important to note that future research should try to embrace more sophisticated and complex gender theories than those outlined and presented in this thesis. Though Chapter 3 includes well-developed gender theory, and some substantial theorists in the area (see Messerschmidt 2002), gender theory needs to be advanced and needs to be further utilized and expanded in criminological research.

## 6.5.3 Assessing Gender (Roles and Expectations, Differences)

Equally important is the need to assess gender traits, roles, and expectations. The literature suggested that there were three gender-based theories that could be utilized to explain the treatment of females including the chivalry hypothesis (that they are protected by men from harm), the convergence hypothesis (that as roles converge, so do rates of female delinquency and processing in the criminal justice system), and the 'evil woman' hypothesis (that women who break gender roles are subjected to harsher treatment than their male counterparts). This thesis presents an analysis of the relationship risky lifestyle activities and violent victimization and the role that gender does (or does not) play utilizing an application of these three competing hypotheses. As is presented in Chapter 5, the convergence hypothesis emerged as the strongest of the three theories insinuating that men and women with risky lifestyles have the same likelihood of being victimized.

Here, the measurement of gender was simple male/female as identified in the demographic section of the GSS. Gender, however, is not that simple. In future research, the measurement of gender should include a variety of variables based on individual perceptions of gender roles and expectations (of self and of others). This would enable the researcher to gain a better understanding of which females are more likely to be victimized (i.e. those with differing views of female social roles and expectations could be compared, and those with different lifestyle behaviours could be compared).

In addition, a separate study exploring the relationship between alcohol consumption, victimization and gender, would be a beneficial endeavour. In this study, it would be necessary to include a wider array of measures of alcohol consumption (i.e. if you consume alcohol, where you consume alcohol, how much you consume, how often you consume, what type of alcohol you consume, how much your peer consume, how much your parents consume, etc). In addition, measures of gender roles and expectations should be included along with measures of gendered behaviours when intoxication (i.e. tendency to be verbally or physically aggressive, etc).

## 6.5.4 Considerations for the Convergence Hypothesis

In this study, the convergence hypothesis emerged as the strongest of the three gender-theory approaches. It is important to note, then, that the evidence is in line with the convergence hypothesis in the very specific context of men and women with risky routine activities who exposure themselves to victimization and not necessarily in the sense of global gender convergence in total. In the current study, convergence is being inferred utilizing cross-sectional data. In order to better study gender convergence in this context, longitudinal data collected over many decades would be required.

## 6.5.5 Race, Class and Gender

Important to note, is that it is necessary to replicate this study to include Aboriginal persons and incarcerated individuals. Since neither was included in the GSS utilized in the analyses for this thesis, the results cannot be generalized to include these two groups. Therefore, it is essential that future research aims at incorporating these groups, or at exploring these groups individually.

Building on this, it is important that future research is aimed at acknowledging the interplay of race, gender, and class. Prior research and theorizing shows that the experiences of individuals across different genders, races, and classes are interrelated and mutually reinforcing; they should therefore be studied together instead of in isolation. Future research should be designed to include interactions and the substantial contributions that race and class play in studying gender, routine activities, and victimization.

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