Dissertations

UMSL Graduate Works

7-10-2014

Racial-Ethnic Differences in Rape and Sexual Assault Victimization: A Pooled Analysis of NCVS Data, 1994-2010

Ekaterina Archakova Gorislavsky
University of Missouri-St. Louis

Follow this and additional works at: https://irl.umsl.edu/dissertation

Part of the Criminology and Criminal Justice Commons

Recommended Citation

Gorislavsky, Ekaterina Archakova, "Racial-Ethnic Differences in Rape and Sexual Assault Victimization: A Pooled Analysis of NCVS Data, 1994-2010" (2014). *Dissertations*. 240.
https://irl.umsl.edu/dissertation/240

This Dissertation is brought to you for free and open access by the UMSL Graduate Works at IRL @ UMSL. It has been accepted for inclusion in Dissertations by an authorized administrator of IRL @ UMSL. For more information, please contact marvinh@umsl.edu.

Racial-Ethnic Differences in Rape and Sexual Assault Victimization: A Pooled Analysis of NCVS Data, 1994-2010

Ekaterina Gorislavsky

M.A., Public Policy Administration, University of Missouri-St. Louis, May 2007
B.A., Linguistics/American Studies, Volgograd State Pedagogical University, June 2002

A Dissertation submitted to the Graduate School at the University of Missouri-St. Louis in partial fulfillment of the requirements for the degree
Doctor of Philosophy in Criminology and Criminal Justice

May, 2014

<u>Advisory Committee</u>

Janet Lauritsen, Ph.D.
Chairperson
Richard Rosenfeld, Ph.D.

Kristin Carbone-Lopez, Ph.D.

Karen Heimer, Ph.D.

ABSTRACT

There are only a handful of studies of racial and ethnic differences in rape victimization at the national level, and many important questions remain unanswered. The current study responds to existing gaps in knowledge and uses pooled data from the National Crime Victimization Survey for 1994-2010 to answer the following five research questions for the three mutually exclusive racial-ethnic subcategories of women in the United States, including Non-Hispanic White, Non-Hispanic Black and Hispanic/Latina females: 1) What is the general productivity of NCVS screener questions relevant with respect to rape and sexual assault? 2) Do females from some racial-ethnic categories need more cues to volunteer information on rape/sexual assault experiences relative to women from other racial- ethnic categories? 3) Are there racial-ethnic differences in the distribution of rape and sexual assault by race and ethnicity and in the way certain characteristics of rape/sexual assault incidents are distributed between the three racial-ethnic categories (including the ratios of completed and attempted rape and sexual assault, repeat and series sexual victimization, injury or serious injury, the presence of a weapon, and victim-offender relationship)? 4) Is membership in a certain racial-ethnic group a significant predictor for the risk of the rape/sexual assault victimization, and in what ways is this relationship affected by such factors, as place of residence, marital status, age, poverty, and other violent victimization? 5) Are there racial-ethnic differences in the effects and effect patterns of the named sociodemographic variables on the risk of rape/sexual assault victimization?

The findings indicate that race and ethnicity is an important predictor for sexual victimization, and there are meaningful racial-ethnic differences in the effects of the predictor factors on the risk of rape and sexual assault. The contextual factors mediate some

of the racial-ethnic differences in sexual victimization, and the underlying mechanisms are explained. White females show highest levels of risk compared to Non-Hispanic Black and Hispanic/Latina women, when the sociodemographic factors are controlled for. However, even controlling for the aforementioned factors, racial-ethnic categories still remain statistically significant. This means there are additional effects, not measured by included predictors. Theoretical, policy and methodological implications are addressed.

TABLE OF CONTENTS

LIST OF TABLES

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to all those who have helped, supported and inspired me in the process of completing this project and the program. First, I would like to thank the members of my dissertation committee. I can say with all honesty that I have learned from the best!

Janet, you have been my mentor, since my first day in the program. I have learned so much working with you on multiple research projects. I have been honored to work with a scholar of such an incredible expertise and impeccable work ethic. Thank you for all your support and wisdom!

Rick, I came into the program when you were the Graduate Director, so you were a person who welcomed me in. Your door was always open for any questions or concerns. Thank you so much for all your help, support and encouragement, and sharing your vast expertise. I still remember how fascinated I was with the issues you introduced in your class on Violent Crime.

Kristin, thank you so much for always being there when I asked you for help! I could not have done that without you. I learned so much in your class on Victimization, and, as you can see, it has had a profound effect on me. Thank you for being thorough about everything you do!

Karen, I have been so lucky to be able to work with you, even indirectly, on a couple of projects! I also had the pleasure of meeting you in person a few years ago. Thank you for your positive energy and your support throughout the project!

INTRODUCTION

Although a great deal of research has been amassed on violence against women, we still have much to learn about the patterns and risks of violence against women – especially women of color. There also remains a considerable gap in knowledge with respect to the victimization experiences of American women of different race and ethnic backgrounds. Patterns of risk vary notably for women of different racial and ethnic backgrounds, but until recently, the research was limited to investigating violence among Black and White women only (Dugan & Apel, 2003). For this reason, information about the differences in the risk of violent victimization is limited by race and ethnicity.

This problem is even more relevant for sexual victimization. There are only a handful of studies of racial and ethnic differences in rape victimization at the national level, and a number of important questions remain unanswered. One of the reasons explaining the lack of information on rape and sexual assault is that it is one of the most difficult crimes to measure. At the same time, it is a statistically rare event and few existing data sources have sufficient sample power for the purposes of the study of rape and sexual assault. Most extant studies do not go beyond simple comparisons of prevalence of rape and sexual assault among women from various racial-ethnic backgrounds, with the exception of a recent study by Lauritsen (2012). She also produces trends by race and ethnicity and compares risk levels of racial-ethnic subcategories.

Due to the paucity of research on rape and sexual assault by race and ethnicity at the national level, there remain important gaps in knowledge. For instance, it is unclear whether and how known correlates of violent victimization against women vary for various racial and ethnic categories in their effects on the risk of rape and sexual assault victimization, or

whether and to what extent some of these factors may explain racial-ethnic differences in risk levels of sexual victimization. It remains unknown what mechanisms underlie racial-ethnic differences in risk levels for sexual victimization, and how these differences are mediated by known risk factors for separate racial-ethnic subcategories of women.

In regards to survey data, little is known about how much of the difference in prevalence of rape among various racial and ethnic categories can be explained by racial and ethnic differences in respondents' willingness to report rape to interviewers (Tjaden & Thoennes, 2006). This question has been raised but has not been answered in the literature.

The current study responds to these important gaps in knowledge and uses pooled data from the National Crime Victimization Survey (hereafter NCVS) for the years 1994 through 2010 to answer the following five research questions for the three mutually exclusive racial-ethnic subcategories of women in the United States, including Non-Hispanic White, Non-Hispanic Black and Hispanic/Latina females (hereinafter referred to White, Black and Hispanic:

1) What is the general productivity of NCVS screener questions relevant with respect to rape and sexual assault?

2) Do females from some racial-ethnic categories need more cues to volunteer information on rape/sexual assault experiences relative to women from other racial- ethnic categories? Are there differences in patterning, dynamics, and substance of reporting by race and ethnicity?

3) What are the percentages of rape and sexual assault by race and ethnicity? Are there differences in the way particular characteristics of rape/sexual assault incidents are

distributed between the three racial-ethnic categories (including the ratios of completed and attempted rape and sexual assault, repeat and series sexual victimization, injury or serious injury, the presence of a weapon, and victim-offender relationship)?

4) Is membership in a certain racial-ethnic group a significant predictor for the risk of the rape/sexual assault victimization? How do these relationships change when other sociodemographic variables are taken into account?

5) Are there racial-ethnic differences in the effects and effect patterns of the named sociodemographic variables on the risk of rape/sexual assault victimization?

The findings of this research help gain better understanding of the mechanisms driving race and ethnic differences with respect to the risk of rape and sexual assault victimization. The study also sheds light on the issue of whether and how these differences are mediated by such factors, as marital status, place of residence, age, poverty, and violent victimization. The present study also sheds light on whether the effects of the aforementioned factors vary by race and ethnicity. Overall, the study produces important information about the effects of contextual factors on the differences in risk levels for sexual victimization for women from the three racial-ethnic categories. This knowledge is essential for the purposes of theory building and directing research efforts.

The current project also has important implications for policy and practice in the United States. The findings of this research help more closely determine subpopulations of women at the highest risk for rape victimization not only among the three racial-ethnic groups, but also by several sociodemographic indicators for each of the three subcategories of women. This information may be helpful in guiding the design and fine-tuning implementation of rape

prevention programs and policies by tailoring them more narrowly to the subpopulations in need of most assistance. At the same time, the information produced by this research may also be helpful for the purposes of better allocation of services aimed to assist victims of sexual violence. The present research also provides information that may be helpful in guiding the design and implementation of policies and programs tailored to women of specific racial and ethnic backgrounds.

Finally, along with important findings on substantive issues, this study also produces useful information about the way rape and sexual assault is measured by the NCVS, and whether there are measurable differences in the reporting by race and ethnicity. This information can be used along with other findings on the effects of methodology for reporting of rape and sexual assault to provide a better understanding of the accuracy and validity of the NCVS data for the purposes of study of rape and sexual assault in general, and, narrowly, by race and ethnicity.

This dissertation is presented in five chapters. The first chapter discusses methodological issues, involved in the study of rape and sexual assault, and factors that complicate such inquiry. This chapter also discusses selective extant sources of national data on the prevalence and incidence of rape and sexual assault and explains why the NCVS has been chosen for this research. The second chapter provides an in-depth review of relevant theoretical approaches and discusses research questions and hypotheses for the current study. The third chapter presents data, measures and analytical approaches used to answer each of the research questions. The fourth chapter discusses the results produced by the analyses. The final fifth chapter concludes the dissertation and provides discussion of substantive implications of the findings and future directions for the research.

Chapter 1: THE STUDY OF RAPE AND SEXUAL ASSAULT

In this chapter, I provide a general overview of the study of rape and sexual assault, which sets the context for the present research. The current study uses data from the National Crime Victimization Survey, which is self-report data; hence, the accuracy of these data directly depends on common perceptions and attitudes about rape and sexual assault that are prevalent within the society. Self-reporting by individual respondents depends on their understanding of what rape and sexual assault are, and what is not included in these notions. It is especially relevant in light of the fact that NCVS directly uses the words "rape" and "sexual assault" in the questions to the respondents. In turn, individual perceptions and interpretations are likely to be affected by common scenarios portrayed by the media and influential organizations. Legal definitions of rape and sexual assault constitute a cornerstone in this respect because they determine what kind of behaviors and actions are illegal and constitute rape and sexual assault, consequently affecting understanding of these concepts by the general public. Legal definitions of rape and sexual assault are important for the current study because the notion of crime is included in the name of the data source used in this research, which affects understanding by the respondents of the goals, objectives and scope of behaviors measured by the survey. At the same time, legal definitions are not the only factor affecting the public understanding of rape and sexual assault.

Also, since this research is based on survey data, understanding of the challenges associated with self-report and strengths and weaknesses associated with various questioning methods is essential for accurate interpretation of the data. Two out of five research questions for this study are associated with reporting of rape and sexual assault to the NCVS. All the

issues I have mentioned above may directly affect reporting of sexual victimization, which is why they should be considered.

On the aforementioned grounds, in this chapter, I discuss definitional and methodological issues affecting and, in some cases, hampering the study of rape and sexual assault at all levels. More specifically, I focus on legal, policy and research definitions for rape and sexual assault, rape and sexual assault data issues: challenges of self-report, questioning methods, and types of questions used and their effectiveness. Finally, I discuss some of extant national sources of data on the prevalence and incidence of rape and sexual assault and explain why NCVS data have been chosen for this study.

DEFINING RAPE AND SEXUAL ASSAULT

The measurement of any behavior hinges on its definition. It is especially true for those behaviors and/or phenomena, for which varying definitions exist. Definitions of rape and sexual assault have evolved significantly over the last few decades, and a certain degree of consensus has emerged on the acts that are classified as rape and sexual assault (Cook et al., 2011). Rape and sexual assaults are complex behaviors, and there are multiple important aspects of these behaviors that should be considered when formulating an appropriate and sound definition of these acts for research and measurement purposes.

Legal Definitions

Despite the traditional understanding that states have primary jurisdiction in the matter of violent crimes, recent years have yielded evidence of an expansion of the Federal Criminal Code to cover many violent crimes, including rape (Kilpatrick & McCauley, 2009). The Federal Criminal Code of 1986 (Title 18, Chapter 109A, Sections 2241-2233) uses the term *aggravated sexual abuse* to include the following two types of behaviors: 1) aggravated

6

sexual abuse by force or threat of force, and 2) aggravated sexual abuse by other means.

Aggravated sexual abuse by force is defined within the code as a type of behavior "when a person knowingly causes another person to engage in a sexual act, or attempts to do so, by using force against that person, or by threatening or placing that person in fear that they will be subjected to death, serious bodily injury or kidnapping (Kilpatrick & McCauley, 2009).

Aggravated sexual abuse by other means includes those acts "when a person knowingly renders another person unconscious and thereby engages in sexual act with that other person; or administers to another person by force or threat of force without the knowledge or permission of that person, a drug, intoxicant, or similar substance and thereby, a)substantially impairs the ability of that person to appraise or control conduct and b) engages in a sexual act with that person" (Kilpatrick & McCauley, 2009, p. 2).

This definition is broad enough to include a wide range behaviors and/or scenarios into the category of rape and sexual assault. First, this definition does not only include unwanted penile penetration of vagina, but recognizes that not all perpetrators are male, not all victims are female, and that rape may include other forms of penetration, such as oral and/or anal. Second, this definition broadens the notion of rape to include not only unwanted penetration achieved by force and/or threat, but also by drug and/or alcohol-facilitation and/or incapacitation.

When it comes to state laws, there exist numerous variations of rape definitions by state (Tracy et al., 2012). For example, Alabama legal definitions of rape and sexual assaults are limited to behaviors committed against members of opposite sex, i.e. excluding homosexual rapes and sexual assaults (Alabama Penal Code, Section 13A-6-60). Forcible compulsion is a common element in defining rape and sexual assault across states, but the elements that are

included under the umbrella of forcible compulsion vary significantly. Missouri statutes, for example, have one of the broadest definitions of forcible compulsion to include "*the use of a substance administered without a victim's knowledge or consent which renders the victim physically or mentally impaired so as to be incapable of making an informed consent to sexual intercourse*" (Missouri Revised Statutes, Section 566.030). Massachusetts legal definition of forcible compulsion, on the other hand, is limited to submission by force and/or threat of bodily injury (Massachusetts General Laws, Section 22a). New York rape laws recognize forcible compulsion in compelling the victim through the use of physical force or the threat of immediate death, physical injury or kidnapping and in cases when the victim is incapable of consent by reason of being physically helpless (New York Penal Code, Sections 130.25-130-35). In terms of specific actions that are identified as rape and sexual assault, most states resort to the use of "sexual intercourse" (Missouri, Massachusetts, New York, etc.), "sexual act" (for example, Vermont; in Vermont, sexual act is defined broadly to include "conduct between persons consisting of contact between the penis and the vulva, the penis and the anus, the mouth and the penis, the mouth and the vulva, or any intrusion, however slight, by any part of a person's body or any object into the genital or anal opening of another" Vermont Statutes, § 3252 – 3253a), and sexual penetration (for example, Hawaii (Hawaii Penal Code, §707-730)).

Based on these somewhat divergent definitions of rape and sexual assault, it is evident that, although there is the common core, i.e. the sexual nature of the behaviors and the element of force, specific aspects and details of behaviors, legally classified as rape and sexual assault, vary. Thus, when it comes to federal and state legal definitions of sexual offenses, although there is a general direction towards consensus, at this point in time, there

is no unified definition that would be universally accepted across the United States. Consequently, we cannot expect consistent understanding of what constitutes rape and sexual assault by females from various jurisdictions in the United States, and, as a result, women from different states are likely to have different conceptualizations of rape and sexual assault, which would affect how they answer questions about these behaviors. At the same time, legal statutes are in the majority of cases limited to most serious behaviors constituting rape and sexual assault. For this reason, it is possible that women may under-report some of the less serious sub-types, such as, for instance, a verbal threat of rape. These considerations have important methodological implications: measures should be taken to ensure that questions used to elicit information on rape and sexual assault are consistently understood by female subjects from various backgrounds. Some of the ways to do so are discussed in the sub-section on methodological issues.

Policy Definitions

World Health Organization (WHO), the United State Department of Justice (DOJ), and the U.S. Centers for Disease Control and Prevention (CDC) represent world-recognized organizations that publish estimates of the nature and scope of rape and sexual assault, set policy, and direct resources accordingly. Thus, it makes sense to consider the definitions of rape and sexual assaults recognized by these bodies. Generally, these definitions have three components. The first component identifies the nature of unwanted sexual act that was compelled; the second characterizes the method used to compel this act, and finally, the third element specifies the expression of nonconsent (Cook et al., 2011). In earlier decades, rape was defined narrowly as penile-vaginal penetration. But the definitions of rape and sexual assault have evolved, and the agencies have advanced their definitions. The U.S. DOJ

(Bureau of Justice Statistics, 2006) and WHO (Krug et al., 2002) now define rape to include penetration of the vulva or anus (WHO) and mouth (DOJ) by a penis, other body part, or other object. Although the U.S. CDC does not use the legal term "rape", the agency's definition clearly aligns with the definitions used by WHO and DOJ (Cook et al., 2011). So, there is a considerable degree of consensus on the first element of the definition.

When it comes to the second component, i.e. the method or tactic used to compel or force sexual act, the amount of consensus decreases considerably. The WHO, for instance, utilizes the term "physically forced or otherwise coerced penetration", i.e. physical force is understood as a type of coercion. The U.S. DOJ includes "forced sexual intercourse including both psychological coercion as well as physical force"; and threatening rape is considered attempted rape. The U.S. CDC's definition excludes specification of tactics.

The third definitional component of rape is comprised of the lack of consent, the circumstances that constitute an inability to consent or inability to refuse (Cook et al., 2011). Neither the WHO, nor the U.S. DOJ defines consent or lack thereof. Such omission is problematic because methods of expressing nonconsent or manifesting inability to consent are critical conceptual aspects of the definition of rape.

Lack of consensus on some of the key elements in rape and sexual assault definition between the three agencies, in many ways mirrors the divergences in legal definitions of these behaviors. It is evident that the understanding and the resulting definition of sexual offenses is still in the process of evolution and finalization. Although there is a positive trend that the definitions are being advanced to include a broader range of behaviors and scenarios, the current lack of a universally accepted definition seriously complicates the issue of

measurement and scholarly study of rape and sexual assault, which, due to their highly

sensitive and personal nature, are probably the most difficult experiences to measure.

The use of various definitions of sexual violence across sources, agencies and studies

makes comparisons of incidence and prevalence rates difficult. However, systematic national

tracking of incidence, prevalence, morbidity and mortality, and costs to society is imperative,

given the costly public health problem that sexual violence presence (Koss et al., 2010a,

2010b; NRC, 2014). National and international agencies have put forth definitions of rape,

which yet remain to be integrated (Cook et al., 2011). Notwithstanding the clearly

complicated nature of the task, adopting standardized definitions rape and sexual assault

becomes necessary to advance knowledge and policy (Koss et al., 2010a, 2010b; Cook et al.,

2011).

METHODOLOGICAL ISSUES

Rape and sexual assault statistics are generated from two sources: 1) cases reported to

law enforcement and 2) victimization surveys. Victimization surveys were created by

criminologists in the late 1960s to measure crimes, including those that are not reported to

the police (Skogan, 1981; Sparks, 1982; Kilpatrick & McCauley, 2009 and many others). In

1987, Smith called rape detection the "biggest methodological challenge" in survey research

(p. 185). Rape and sexual assault incidents are rarely observed and almost always occur in

private places. Survey research has been open to a number of criticisms due to the fact that it

is based on self-report data. Concerns about the overall validity of the self-report data on

sexual victimization have been voiced, and the discussion of how to best measure sexual

victimization has involved much methodological debate (see Fisher & Cullen, 2000; Krebs et

al., 2011). It is possible that some survey respondents report that they have experienced

sexual assault when in reality they have not (i.e., false positives), and some victims are understandably unwilling to disclose that they have experienced rape or sexual assault (i.e., false negatives). Researchers have provided compelling explanations for why women may under-report experiencing sexual victimization (Campbell, 2008; Krebs et al., 2011). If this is the case and self-report data are significantly impacted by false negatives, then it is very likely that researchers are underestimating the prevalence of rape and sexual assault. However, our understanding of the validity of self-report sexual assault data is somewhat limited by the lack of a mechanism to externally validate estimates and also due to the fact that researchers do not always employ uniform definitions of the outcomes being measured or agree on the best approach for obtaining information from potential victims (Fisher & Cullen, 2000; Krebs et al., 2011).

However, it is important to note that health and crime data ultimately rest on victims' self-report (Cook et al., 2011); and the validity of virtually all data on sexual violence is potentially compromised by victims' decisions to report and/or disclose that information or not (Testa et al., 2004).

Challenges of Self-Report

Victimization surveys involve asking respondents a series of screening questions designed to encourage recall and disclosure of various types of crime that the respondents may have experienced. This method gathers detailed information about any crimes disclosed during the interview, including whether or not they have been reported to law enforcement (Kilpatrick & McCauley, 2009).

Kilpatrick and colleagues (Kilpatrick, Edmonds & Seymour, 1992) describe self-report as a process that begins when an individual first perceives a potentially traumatic experience

and encodes it into an emotional, sensory, and narrative memory. Victims' narratives of their experiences do not necessarily involve remembering an unwanted sexual experience as rape, a phenomenon known as unacknowledged rape (Cook et al., 2011; Fisher et al., 2003; Kahn & Mathie, 2000; Koss, 1985; Layman et al., 1996 and others). Unacknowledged rape may occur in up to 50% of victims (Cook et al., 2011; Fisher, Cullen, & Turner, 2000).

The next important step and consideration is to develop a sound sampling design because an individual cannot report rape in a study unless the sampling design includes them (Cook et al., 2011). Many studies use convenience samples (for instance, Ewards et al., 2009; Turchik et al., 2009). There are also large, nationally representative surveys that will be discussed later in this chapter.

Once a respondent is included in a sample, the third and most critical step is to effectively cue the recall. Questions must be formulated in such a way to jog recall of experiences the survey aims to identify; at the same time, the selection of questions must fully implement the definition of rape and sexual assault the researchers have adopted (Cook et al., 2011). There are multiple factors beyond the content of the questions themselves that influence the success in leading the participants to remember and disclose sexually assaultive incidents. In addition to purposeful decisions, participants may unconsciously fail to disclose because for various reasons they do not remember the assaultive incident. Research on the cognitive aspects of survey methodology have underlined that once memories have been elicited and retrieved, respondents edit them to formulate their response, and there are many reasons that adult respondents may decide not to disclose.

Three psychological dimensions that can impact a respondent's willingness to answer a sensitive question accurately and honestly have been identified as follows: the social

undesirability of the response, the intrusiveness of the inquiry, and the perception of disclosure to third parties (Tourangeau et al., 2000; Ongena & Dijkstra, 2007; Krebs et al., 2011). The validity of self-report data on sexual victimization collected via direct questioning methods may be vulnerable to all three of the aforementioned factors. The victims may feel uncomfortable with the interviewer, ashamed and fearful to report what happened, especially in a face-to-face setting, due to the high level of social undesirability of rape and sexual assault. At the same time, the respondent may be offended to some degree of the intrusiveness and/or overall graphic nature of the questions. Finally, the respondents may doubt that the survey is truly anonymous or confidential and feel apprehensive regarding the possibility of being identified by their answers and experiences, and their identities becoming known to others, and fear consequences that may follow disclosure, including retribution, stigma, disbelief, and minimization of the experience (Testa et al., 2005; Cook et al., 2011; Krebs et al., 2011).

Another group of factors that may affect respondents' recall and willingness to disclose their experiences to interviewers are more closely linked to specific methodological designs adopted by researchers. These factors include, but are not limited to, the following: the number of questions asked, phrasing, and the subject matter of the survey and surrounding questions in which rape screening appears (Cook et al., 2011). Cook and colleagues (2011) discuss a study by Abbey, Parkill, and Koss (2005) where the researchers assessed whether the frame of reference used at the beginning of the questions affected rates of self-report victimization and perpetration. Two surveys were conducted that contained the same experiences, but the methodology varied the order of phrases in screening items. In one version, the screening questions began with the type of unwanted sex act, while in the other

version, the tactic employed to compel the unwanted act appeared first. The results indicated that for both men and women (but more pronounced for men), having the tactic as the primary clause resulted in higher rates of reported victimization and perpetration experiences. When the tactic was listed first, rather than the sex act, an additional 13% of women and 33% of men reported victimization and perpetration, respectively. These results underscore the importance of accounting for the effectiveness of questions in terms of eliciting targeted memories from the perspective of the focus of inquiry (Schwarz, 2007; Cook et al, 2011). For the reasons discussed above, the matters related to choosing a specific method of obtaining information on rape and sexual assault and specific type of questions become crucial.

Direct and Indirect Questioning Methods

One of the most well-known methods for ensuring a higher level of validity of self-reported data on sensitive behaviors involves using self-administered questionnaires (SAQs). SAQs are different from surveys using interviewer-asked questions in that the respondents complete SAQs on their own (for example, in a web-based or paper format), thereby avoiding some of the threats to validity associated with the aforementioned psychological dimensions. Krebs et al (2011) discuss some of the key examples of research studies that have demonstrated that SAQs may yield more valid estimates compared to interviewer-asked surveys. These examples include a study by Jones and Forrest (1992), who found that SAQs increase the validity of abortion data, and research by Turner, Lessler, and Devore (1992), who found that SAQ items resulted in higher self-report estimates of drug use in contrast to interviewer-asked questions. Numerous research studies have used SAQs to obtain data on sexual victimization experiences, but Koss and her colleagues were among the first and their

Sexual Experiences Survey (SES) has been the most widely used instrument (Koss, 1992; Koss et al., 1987, Koss & Oros, 1982; see also Krebs et al., 2011).

Some studies have been conducted to determine, whether web-based SAQs are able to generate valid estimates on sensitive topics. For example, studies by McCabe et al (2002) and by McCabe (2004) assessed whether prevalence estimates of illicit drug and alcohol use by college students varied based on whether the information was collected online or by mail. Both studies found no significant differences between the two modes of obtaining information, and demonstrated that web-based surveys are a credible method of collecting sensitive data from students. Uriell and Dudley (2009) compared effectiveness of mailed and web-based surveys in collecting information on family planning attitudes and birth control usage among a military sample, and found that both modes produced statistically similar results and neither mode results in higher perceptions of privacy and confidentiality. Naus, Phillip, and Samsi (2009) arrived at a similar conclusion about paper and web-based assessments of quality of life, depression and personality among students, and also found that the sample reported the web option to be convenient, user friendly, and secure.

As a group, these studies demonstrate that web-based surveys are a viable method of collecting information on sensitive behaviors and experiences, and they are no less effective than other direct questioning methods.

Another strategy utilized to increase the validity of prevalence behavior is indirect questioning techniques. In indirect questioning, the series of questions do not elicit individual-level data about a behavior or an event of interest; they rather enable prevalence estimation of the behavior or event for the sample of respondents (Kreb et al., 2011). This approach is believed to increase validity of prevalence estimates, particularly for sensitive

behaviors because respondents are not being asked to report their experiences directly – which thereby alleviates the aforementioned psychological issues with question sensitivity (Tourangeau et al., 2000) that can affect respondents' comfort and willingness to provide valid responses.

One of indirect questioning methods that is frequently employed to generate prevalence estimates of a sensitive behavior or an event for a sample is known as the item count technique (Ahart & Sackett, 2004; Droitcour et al, 1991). The item counts technique answers concerns about the validity of estimates by illuminating factors that are commonly believed to motivate the respondents to not respond honestly and truthfully to survey questions about sensitive behaviors (Dalton et al, 1994; Krebs et al., 2011; Tourangeau & Yan, 2007) because the respondents are not directly asked to disclose a sensitive behavior. Although the item count technique has been used primarily in the field of business psychology to determine involvement in illegal or sensitive behaviors in the workplace (LaBrie & Earlywine, 2000), it is an innovative method with a great potential for the study of sensitive topics, such as sexual victimization (Krebs et al., 2011). However, the item count technique also has certain limitations that are worth discussing. First, it requires a large sample to ensure that the resulting prevalence estimate is representative. Second, it is necessary that respondents believe that the item count questions are as straightforward as they appear. If they suspect that after answering the item count question, they are going to be subjected to further questioning about the details of things they have experienced, they may have a reason not to answer the indirect question accurately or truthfully, which may result in a depressed indirect estimate. Third, for some respondents, it may be confusing or challenging to answer the item count questions (Droitcour et al., 1991). Finally, another limitation of the item count

technique is the impossibility to identify individual respondents who have reported a sensitive item or behavior. Therefore, when used exclusively, the item count technique precludes researchers from being able to analyze any individual-level factors associated with a sensitive item or behavior (Krebs et al., 2011).

Therefore, there are reasons why the use of indirect questioning, and the item count technique in particular, may be limited and is not suitable for certain applications. At the same time, the logic behind these methods seems sound, and one potential use may be to enable the comparison of direct and indirect estimates, and consequently, assessing the validity of sensitive data obtained via direct questioning methods (Krebs et al., 2011).

Broad vs. Behaviorally Specific Questions

Questions aimed at eliciting information about rape and/or sexual assault may be phrased in multiple ways, and such phrasing in direct relationship with the survey design and procedures used to score and classify the responses.

The National Crime Victimization Survey (NCVS) initially utilized a broad question that served as a gate item to cue recall of rape experiences. If the respondent answered positively to the broad question, such as "have you been raped", a set of specific follow-up questions would then be asked (Cook et al., 2011; Koss, 1992). Whether or not the behavior was to be classified as rape depended solely on the answers to the follow-up questions. Critics of this technique argued that the initial use of broad questions resulted in the under-detection of rape because they were not effective in cuing and disclosing rape. The major concern was that the follow-up questions were skipped altogether if the response to the gate question was negative. There may be a variety of reasons why a broad question about rape would not be adequate in effectively eliciting information about such experiences (Cook et al., 2011; Koss,

1992, 1996). One of important considerations in this relation is that the individual experience of the respondent may differ from the common stereotype of what is considered rape, and would not be reported for this reason. The persistent stereotype of rape is that it is a brutally violent crime between strangers (Kilpatrick, 2004), which can lead to under-reporting of such instances, as, for example, a rape by an acquaintance or intimate partner. However, the gate strategy is not necessarily linked to broad questions.

Recognizing the limitations of using a term that requires respondents to be familiar with official definitions of rape and to overcome biases in how rape is stereotypically perceived, researchers initiated the use of behaviorally specific questions (Cook et al., 2011; Koss et al., 1987; Koss & Oros, 1982), such as Sexual Experiences Survey (SES). The SES included the defining characteristics of rape in survey items themselves (i.e., the sexual act, the type of coercion or predation, and the absence of consent), and the questions were administered to all participants. For example, the Revised SES includes the following: "A man put his penis into my vagina", or "someone inserted fingers or objects without my consent by using me sexually when I was asleep or unconscious from alcohol, and when I came to (regained consciousness) I could not give consent or stop what was happening" (Cook et al., 2011, p. 205; Koss et al., 2007). If the respondent answered positively to this question, their experience would be immediately identified as rape making any follow-up questioning unnecessary. The follow-up questions in the SES are intended primarily for case identification; although, additional items may help develop a more detailed understanding of the characteristics and circumstances surrounding the unwanted act that has been reported.

Other researchers have also adopted this direct approaching when developing measures of victimization (and perpetration) for rape and other forms of sexual assault. According to

Cook and colleagues (2011), at least nine self-report instruments, other than SES, follow this

model; however, not all measures consistently include all definitional elements. These

instruments include The Abuse Severity Measure (Lesserman et al., 1997), Aggressive

Sexual Behavior Inventory (Mosher & Anderson, 1986), Assessment of Sexual Aggression

Scale (Meyer et al., 1996)., Coercive Sexuality Scale (Rapaport & Burkhart, 1984), the

Conflict Tactics Scale-Revised (Straus et al., 1996), the Measure of Wife Abuse (Rodenburg

& Fantuzzo, 1993), Severity of Violence Against Women Scale (Marshall, 1992), Sexual

Coercion in Intimate Relationships Scale (Shackelford & Goetz, 2004), and the Use of Force

in Sexual Experience Scale (Petty & Dawson, 1989). Behaviorally specific questions have

also been utilized in large-scale studies, including the WHO's Multi-Country Study

(Ellsberg, Jansen, Watts, Garcia-Moreno, & the WHO Multi-Country Study on Women's

Health and Domestic Violence against Women study team (2008)), Rape in America

(Kilpatrick et al., 1992), and the National Violence Against Women Study (Tjaden &

Thonnes, 1998). Furthermore, behaviorally specific questions are employed in a majority of

research on rape victimization and perpetration (Cook et al., 2011).

There is some evidence in favor of the superiority of behaviorally specific questions

compared to broader questions. The accumulating evidence from nationally representative

studies (see Cook & Koss, 2005) together with Fisher's (2009) study support the conclusion

that broadly worded questions combined with a gate strategy may lead to under-detection.

However, popular use of behaviorally specific approach is not sufficient to establish it as

a standard. The most fundamental concern remains construct validity and the question

whether the respondents interpret behaviorally specific questions in the way intended by the

researchers (Cook et al., 2011; Koss et al., 2007). This issue is quite complex, taking into

account the necessary condition for the questions to have equivalent meaning for respondents in groups on diverse factors as ethnicity, socioeconomic status, culture, and age (Cook et al., 2011).

Several recent investigations have used a two-stage approach (Cook et al., 2011; Fisher & Cullen, 2000; Kilpatrick et al., 2007) to correct for potential over-inflation of the estimates obtained through the use of instruments such as the SES. These studies combine behaviorally specific questions with subsequent incident reports (i.e. follow-up questions) that are administered to every respondent. Classification of rape is accomplished in the second stage of self-report. However, the two-stage design also has its limitations. Each question contains multiple components in an effort to be comprehensive, which may lead to ambiguity and extra complexity for the respondents. The respondents may become confused about how to respond when some of the components of a question may apply to them, while others may not. Moreover, involved questions may overload the respondent's working memory (Just & Carpenter, 1992), causing the respondent to forget parts of the questions and provide partial answers (Tourangeau et al., 2000). It is possible that the two-stage approach reduces error from the behaviorally specific question, but at the same time, it may be introducing error from the incident report.

Based on the above discussions, the field of the study of sexual victimization is currently hampered not only by the lack of a standard definition of rape and its key components (act, tactics and nonconsent), but also by the lack of a standard validated empirical method of detecting rape victimization. Various researchers and studies employ varying methods, approaches and designs, which makes it difficult to compare resulting estimates, and accumulate systematic and consistent knowledge about sexual victimization and predation.

This limitation is especially significant for the study of rape and sexual assault at the national level.

SOURCES OF NATIONAL STATISTICS ON PREVALENCE/INCIDENCE OF RAPE AND SEXUAL ASSAULT

In this sub-section, I discuss and compare some of extant data sources on national prevalence and incidence of rape and sexual assault in the United States, and explain why the NCVS has been chosen to answer research questions in this study.

Uniform Crime Reports (UCR)

The UCR is a statistical system created and operated by the Federal Bureau of Investigation (FBI) that estimates the number of forcible rape and attempted forcible rape as well as other violent crimes that are reported to participating law enforcement agencies across the U.S. Reports *"Crime in the United States"*, based on the UCR estimates, are published annually.

The UCR defines *forcible rape* as *"a carnal knowledge of a female forcibly and against her will."* Carnal knowledge is defined as "the act of a man having sexual bodily connections with a woman; sexual intercourse" (FBI, 2011). Assaults or attempts to commit rape by force or threat of force are also included; however, statutory rape (without force) and other sex offenses are excluded" (FBI, 2011). Only rapes or attempted rapes of women are included in the report.

This definition is very narrow, as it only includes forcible vaginal penetration, excluding a significant number of other behaviors that also constitute rape and sexual assault. Rapes by means of the victim's intoxication, or inability to consent, are not included in this assessment (Kilpatrick & McCauley, 2009). However, beginning with the 2013 data collection, the UCR

definition for the violent crime of forcible rape will be modified to: "Penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim." This is a significant development, considering the definition for rape used in the UCR has not changed since 1929. A new, broader definition will allow the FBI to count in significantly more behaviors that fall under the category of rape, and, consequently, reduce undercounting rape in the United States.

In 2011, the UCR reported rate of forcible rape of 52.7 per 100,000 female inhabitants (in 2011, the old narrow definition of forcible rape was used). Rapes by force comprised 93% of reported rape offenses in 2011, and attempts or assaults to commit rape accounted for 7.0% of reported rapes (FBI, 2012).

As official police data, the UCR only counts rapes reported to the police, which means it does exclude the so-called "dark figure of crime". It may present a problem because, as indicated by research, only 1 in 6 victims reports their victimization to the authorities (Kilpatrick & Ruggiero, 2004). Participating law enforcement agencies compile information on relevant cases (based on the definition above) and send it either directly to the FBI or to an agency at the state level that processes cases and then send them to the FBI (Kilpatrick & McCauley, 2009). The UCR excludes *unfounded cases of rape*, i.e. those that have been found baseless or groundless in the course of the investigation (according to the federal reporting requirements). Therefore, there are reasons to suspect that UCR is significantly undercounting rape prevalence.

However, the most important consideration for the current study is that UCR data cannot be used to estimate rates by race and ethnicity because this data collection does not contain

victim information for nonlethal events. The National Incident-Based Reporting System (NIBRS), which is a modern addition to the UCR system, does contain data on victim characteristics. But currently, only approximately 25 percent of the U.S. population report through NIBRS; hence, these data cannot be used for meaningful national-level crime statistics (NRC, 2014).

National Women's Study (NWS) and National Women's Study – Replication (NWS-R)

The NWS was a victimization survey of adult women in the United States that included victimization events either reported or unreported to authorities (see Kilpatrick et al., 1992; Kilpatrick & McCauley, 2009; Resnick et al., 1993). The NWS only had three waves of data between 1989 and 1991, following respondents from wave 1 through two additional waves. These data were obtained through telephone interviews (using a random digit dial methodology) with an initial household sample of 4,008 adult U.S. women aged 18 and older (NRC, 2014). One-year follow-up interviews were conducted with 3,220 women from the original sample; and 3,006 women from the original sample participated in two-year follow-up interviews. The participation rate for the study was 85.2% of screened and eligible women who agreed to participate in the study and completed the first interview.

The NWS employed all-female, trained interviewers and put in place measures to ensure participant's privacy during the interview completion. The study utilized behaviorally specific questions and avoided the use of undefined summary labels, such "rape" or "sexual assault". This research assessed women's experiences of forcible rape that occurred throughout their lifetime (by assessing for most recent/or only incident and first incident

rapes), as well as between the baseline and two follow-up interviews (Kilpatrick & McCauley, 2009).

The study found that the prevalence of lifetime experiences of rape was 12.65%. The results also demonstrated that 71 out of every 10,000 women reported rape experiences in the year prior to the survey. The study also found that only 16% of rape victims surveyed in the study stated that had reported their rape to the law enforcement.

In 2006, the National Institute of Justice funded a study entitled "Drug Facilitated, Incapacitated, and Forcible Rape: A National Study (NWS-R) (Kilpatrick et al., 2007). One of the reasons behind that was the fact that the majority of previous studies at the national level had omitted assessments of rape under the conditions of victim's intoxication, so the study attempted to fill this gap. This national study included detailed assessment of lifetime and the past year prevalence for 1) forcible rape experiences, 2) incapacitated rape experiences, and 3) drug-alcohol facilitated rape experiences. 3,001 women aged 18 to 86 sampled from U.S. households using random-digit dial methodology were interviewed. All interviews were held via telephone by a trained all-female interviewing staff using computer-assisted interview technology; and all participants were asked if they were in a setting ensuring the privacy of their responses prior to proceeding with the interview. The study defined rape as "penetration of the victim's vagina, mouth or rectum by a penis, finger, or object, without consent". Questions were closed-ended (yes/no) and behaviorally specific (Kilpatrick et al., 2007; Kilpatrick & McCauley, 2009).

The study found that 18% of women reported at least one lifetime incident of any type of rape, which corresponds to a population estimate of approximately 20 million women in the U.S. Nearly one-fifth of women (16.1%), approximately 18 million women, reported a

lifetime experience of forcible rape. An estimated 3.1 million (2.8%) and 2.6 million (2.3%) U.S. women reported incidents of incapacitated or drug-facilitated rape, respectively. Past year prevalence of forcible rape was estimated at 0.7% (829,000 women); for incapacitated and drug-alcohol facilitated rape, these estimates amounted to 0.3% (303,000 women) and 0.2% (179,000 women) respectively. The findings indicated that in total, over 1 million women in the U.S. (0.9%) had had a rape experience in the year prior to the study.

Although the methodology of these two studies was sound, and the questions used were behaviorally specific, which is regarded as the most effective method of eliciting information on rape and sexual assault, the data obtained as a result of these studies are not best-suited to address research questions in this study. The major limitation of the original NWS is that it was conducted twenty five ago, and is of limited value for the study of rape and sexual assault in 2014. As for the replication study, it was conducted only in 2006 and contains estimates for a single year. It is unclear whether findings based on these data can be generalized for other years. Finally, these data are eight years old, which makes it less preferable if more current estimates are available.

National Violence Against Women Survey (NVAWS)

The NVAWS (Kilpatrick & McCauley, 2009; Tjaden & Thoennes, 2000; Tjaden & Thoennes, 2006) was a national household probability survey involving U.S. adult women (age 18 and older) and adult males. It was conducted from November 1995 to May 1996 and covered all households with a landline telephone in 50 states and the District of Columbia (NRC, 2014). This study also included cases of forcible rape that were both reported and unreported to authorities. The data were collected through telephone interviews, and a national probability sample of 8,000 adult women and 8,005 adult men was selected via

random-digit dialing methods. The participation rate for women screened and deemed eligible for participation was 61.7%, which was lower than for the NWS.

The NVAWS methodology of assessment was similar to that of the NWS: behaviorally specific questions were used to elicit recall and disclosure of information about rape and attempted rape experiences.

The NVAWS found a 14.8% lifetime prevalence of rape among women, and an additional 2.8 % of female respondents reported an attempted rape experience. NVAWS data also reported the prevalence of women in the U.S. who had been raped in the past year. The past year prevalence of rape corresponded to 27 women per every 10,000 women.

The NVAWS data are also of limited value for answering research questions in this study because the data are old, and they only represent estimates for a single year. It is also problematic that NVAWS estimates for rape are very high, compared to other data sources, such as the NCVS.

National Crime Victimization Survey (NCVS)

The NCVS is conducted by the U.S. Department of Justice, Office of Justice Programs and housed in the Bureau of Justice Statistics. The NCVS, and its predecessor the NCS, contain self-report data on personal and household victimization in the United States since 1973. The survey currently uses a nationally representative sample of approximately 76,000 households comprising nearly 135, 000 persons to collect information on the frequency, characteristics and consequences of criminal victimization in the U.S. (BJS, 2010). In each household, all persons 12 years of age and older are interviewed. New households are rotated into the sample on an ongoing basis and, once selected, a household remains in the sample

for three years. The NCVS is currently administered in both English and Spanish versions (BJS, 2010; NRC, 2014).

Every six months, the NCVS collects detailed information on the frequency and nature of rape cases, regardless of whether these cases were reported to the police. NCVS questionnaire consists of two major parts: screener questions and detailed incident report. The screener is used to identify whether or not a victimization incident has occurred. It contains a number of different cues or prompts aimed to trigger recall and encourage reporting of an incident by the victim. It should be noted that the respondent herself is not required to define the event as rape or sexual assault. The positive response to one of the cues or questions about the various forms of assault by the respondents prompts the administration of a detailed incident report for each of the incidents. Subsequently, the details recorded in the incident report are used to classify the event into one of the eight subcategories of events that fall under "rape and sexual assault" in the NCVS (completed rape, attempted rape, sexual assault with serious assault, sexual assault with minor assault, sexual assault with injury, unwanted sexual contact with force, verbal threat of rape, verbal threat of sexual assault) (Lauritsen, 2012; NRC, 2014).

Questions on the survey assess victim information (including age, sex, race, ethnicity, marital status, income, and educational level), offender information (including sex, race, approximate age, and victim-offender relationship), and information about the crime incident itself (time and place of occurrence, use of weapons, nature of injury, and economic consequences (BJS, 2010).

The NCVS measures sexual violence that includes completed, attempted, and threatened rape or sexual assault. The victimizations are classified as rape or sexual assault even if these

occur simultaneously with other crimes, such as robbery and other forms of assault. The NCVS uses the following definitions of rape and sexual assault. Rape is understood as *"unlawful penetration against the will of the victim, with use or threatened use of force, or attempting such an act. Rape includes psychological coercion and physical force, and forced sexual intercourse means vaginal, anal, or oral penetration by the offender. Rape also includes incidents where the penetration is from a foreign object (e.g., bottle), victimizations against male and female victims, and both heterosexual and homosexual rape. Attempted rape includes verbal threats of rape"* (U.S. Department of Justice, OJP, BJS, 2013., p. 2). Sexual assault is assessed by the NCVS separately from rape or attempted rape. It includes *"attacks or attempted attacks generally involving unwanted sexual contact between a victim and offender. Sexual assault may or may not involve force and includes grabbing or fondling. Sexual assault also includes verbal threats"* (U.S. Department of Justice, OJP, BJS, 2013., p. 2).

There are two items in the NCVS screener that directly target information on rape experiences for both men and women. They are: 1. *"Has anyone ever attacked or threatened you in any of these ways: any rape, attempted rape, or other type of sexual attack? 2. Incidents involving forced or unwanted sexual acts are often difficult to talk about. Have you been forced or coerced to engage in unwanted sexual activity by: a) Someone you did not know before? b) A casual acquaintance? c) Someone you know well?"*

Based on the findings in 2010 NCVS, the rate of rape and sexual assault victimization among females was 1.3 per 1,000 females age 12 and older. Black females and females representing two or more races demonstrated the highest rates of rape and sexual assault victimization (1.1 and 1.2 per 1,000 respectively) compared to females from other racial-

ethnic groups. The 2010 findings also indicate that females age 12 to 14 and age 15 to 17 comprise two highest risk age categories for rape and sexual assault with the estimated rates of 2.7 and 1.7 per 1,000 respectively, followed by females age 21 to 24 years with the rate of rape and sexual assault victimization at 1.5 per 1,000.

The National Research Council (2014) has recently released a detailed report on *Estimating the Incidence of Rape and Sexual Assault*, which focused primarily on the NCVS and ways to improve the accuracy of the NCVS data on rape and sexual assault. The panel undertook an examination of the total error structure of the NCVS, including sampling, measurement, and specification errors. The findings that are especially relevant for the current research have to do with the sampling error in the NCVS. The panel concluded that the sampling errors for estimates of important subpopulations, including Blacks and other racial-ethnic groups, are quite large, and yearly estimates for subpopulations are unstable. This fact is especially detrimental for longitudinal studies focusing on year-to-year variations for various subgroups. Pooling the data is the only way to stabilize estimates for important subpopulations. The panel overall concluded that the NCVS is likely to be undercounting rape and sexual assault victimization. Possible reasons for that include ineffective sampling for behaviors of such low frequency, lack of behaviorally specific questions and high sampling errors for population at risk for rape and sexual assault.

Despite the fact that the NCVS have a large enough sample for the purposes of studying subgroup differences in various types of victimization, these data have been questioned by many researchers as a source of accurate information on rape and sexual assault because of what they believe to be fundamental problems with the NCVS methodology, such as a narrow definition of sexual assault, problematic language used in survey questions among

others (Schafran & Weinberger, 2010; Koss, 1996; Kilpatrick & McCauley, 2009). Notwithstanding these potential weaknesses, the NCVS produces invaluable nationally representative data on rape and sexual assault that can be disaggregated not only by racial-ethnic categories but by a number of victim and incident characteristics.

Hence, NCVS data have been chosen to answer research questions in the current study for the following reasons. First, NCVS has been in existence, since 1973, which makes it a well-established source of statistical data. Second, the NCVS is based on a nationally representative sample of the U.S. population, and NCVS response rates have historically been quite high (from around 90% in 1993 to approximately 95% in 2005, according to the NRC). Third, NCVS data also contains important details about victims and incidents, which are essential for the current study. Although this statistical system has its own limitations, a wealth of information is available on the structure and size of its sampling error, and specific weights have been created to correct for these errors (which is directly relevant for the current study). Information on the error structure does not exist for other data sources. The NRC panel concluded that although the errors are quite large in the NCVS, they may be even larger in other data systems (2014). Rand and Rennison (2005) also concluded that NCVS was internally valid compared to NVAWS. Some of the validity of the NCVS data is associated with such technique as "bounding", which is unique to the NCVS. The strategy consists in the fact that data from the first interview with a respondent are not included in the estimated victimization rates. The information obtained in the course of the first interview is used to reduce potential telescoping by the respondent (Lauritsen, 2012; NRC, 2014). Although NCVS data have always contained some unbounded interviews, and in 2006 unbounded interviews were officially introduced into the data to correct for sampling

cutbacks (Lauritsen, 2012; Rand, 2008), the data from first interviews are adjusted using a specific adjustment factor to reduce telescoping and resulting overcounting.

Summary and Conclusions

The importance of study of rape and sexual assault, as well as sexual victimization and sexual violence, is well-understood, and considerable resources and effort have been invested in this important endeavor. However, there are a number of critical factors that have been significantly impeding the accumulation of knowledge and furthering of our understanding of these phenomena. First, there is still a lack of a unified universally accepted definition for rape and/or sexual assault. Existing definitions vary considerably on every level of inquiry: including legal codes utilized by states as well as definitions used by various agencies and organizations conducting research on sexual violence and victimization and collecting statistical data on the prevalence and incidence of rape and sexual assault. There is a general positive tendency to expand and advance definitions in order to make them better able to reflect and capture the most recent knowledge and understanding about rape and sexual assault, because it represents a fundamental definition of these behaviors, serving as a basis for all other definitions. Uniform legal definition of rape and sexual assault seems both plausible and necessary. The legal definition of this behavior affects the mental image and stereotypical perceptions of what is and what is not rape/sexual assault by individuals within the society, hence, affecting research definitions aimed at measuring phenomena conditioned by these mental images and perceptions.

Another important issue complicating the accumulation of knowledge and data on sexual victimization is divergent methodology used in various studies, which renders their findings

incomparable and difficult to use in combination. Apart from the official police data collections, the majority of research studies on rape and sexual assault rely on self-report data, but these studies still use a variety of research designs, as well as questionable methodologies, to render comparisons of their findings problematic. These methodologies include in-person and phone interviews, online and mail surveys. Specific questions utilized in the studies also vary significantly. Behaviorally specific questions are used in the majority of studies, but some studies also rely on general questions as well.

Finally, a few extant data sources estimating prevalence and incidence of rape and sexual assault have been considered to answer the research questions in this study. Since all my research questions concern rape and sexual assault among racial-ethnic groups at the national level, nationally representative data were necessary to answer these questions. In the process of identifying the best suitable data for this research, I have considered four primary data sources that can be used to measure the prevalence and incidence of rape in the United States: They are Uniform Crime Reports (UCR) by the FBI, National Women's Study (NWS), National Violence Against Women Survey (NVAWS), and National Crime Victimization Survey (NCVS) by the BJS. NWS and NVAWS were excluded because they each contain data for a very limited time frame: NWS only had three waves of data, 1989-1991 (Kilpatrick et al., 1997; Resnick et al., 1993); and NVAWS was only conducted for two years: in 1995-1996 (Tjaden & Thoennes, 2000). These data sources also have large sampling errors (NRC, 2014). Finally, UCR was dismissed because it does not contain sociodemographic measures for victims of non-lethal violence and incident characteristics. Thus, NCVS has been identified as best-suited for providing answers to the research questions in this study.

Chapter 2: THEORY AND HYPOTHESES

In this chapter, I discuss theoretical approaches informing the present study. Among those currently existing in criminology and sociology, there is no theory that would fully explain possible relationships between race and ethnicity and rape/sexual assault victimization. However, there are several directions in scientific thought that may provide relevant insights and inform the current study. These are as follows: theories of victimization, theories of rape and sexual violence, and finally, theories linking race and ethnicity with risk factors for violence. I discuss these groups of theories in this chapter.

THEORIES OF VICTIMIZATION

Risky situations and settings are important to understanding the contexts that facilitate rape and sexual assault victimization and perpetration. The two key theories of victimization - routine activities (Cohen & Felson, 1979) and lifestyle-exposure (Hindelang et al., 1978) posit that certain behaviors or activities that place women in close association with, or proximity to potential offenders are important for understanding women's increased risk of rape and sexual assault victimization.

The routine activities approach was first introduced by Lawrence Cohen and Marcus Felson in 1978 in reaction to the fact that many conventional theories of crime at the time had been having difficulty accounting for the annual changes in crime rate trends in the post-World War II United States. Notwithstanding the fact that social indicators that had been normally offered as macro-level explanations for the levels of violent crimes, such as the unemployment rate, number of people living in poverty, interracial disparity of median incomes and others, had improved significantly at the time, the rates of robbery, aggravated

assault, forcible rape and homicide demonstrated considerable increases. Cohen and Felson (1979) argued that the explanation for the trends lies with the "routine activities" of everyday life and they related their approach to classical human ecological concepts. They argued that the structure of these activities influenced criminal opportunity, thereby affecting trends in what they refer to as 'direct-contact predatory violations'.

One of the key ideas behind the routine activities approach is that there are three minimal elements of direct-contact predatory violations: (1) motivated offenders with abilities to carry out their criminal inclinations, (2) suitable targets, and (3) the absence of guardians capable of preventing violations. Based on the theory, if any of these elements is absent, it is sufficient to prevent successful completion of a direct-contact predatory crime. The theory also argues that structural changes in routine activity patterns can influence crime trends by affecting the convergence in space and time of these three elements necessary for a crime to occur. The routine activities approach shifts focus of criminological inquiry from structural conditions that motivate individuals to engage in crime to the manner in which the spatio-temporal organization of social activities helps people translate their criminal inclination into action.

Cohen and Felson (1979) assert the interdependence between offenders and victims as a predatory relationship between functionally dissimilar individuals or groups. They view the spatial and temporal structure of routine legal activities as playing a critical role in determining the location, type and quantity of illegal acts occurring in a given community or society. Routine activities theory draws attention towards the way the structure of community organization as well as the level of technology in a society may create favorable conditions for crime to thrive. It also focuses on the way daily routine activities separate people from

those they trust and the property they value, and bring together persons of different background which influence the commission or avoidance of illegal acts. It is believed that the timing of work, schooling and leisure may be of central importance for explaining crime rates. Cohen and Felson (1978) defined routine activities 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 & Felson, 1979, p.593). They argued that increases in direct-contact violent predatory crimes in 1960-1975 are explained by a major qualitative shift of routine activities that had occurred in the United States since World War II. That shift was associated with the majority of routine activities turning from home-based into occurring in jobs away from home and/or other activities away from home, especially involving non-household members. It is argued that the shift in the routine activities increases the probability that motivated offenders will converge in time and space with suitable victims in the absence of capable guardians, thus, contributing to significant increases in violent crimes.

Though the routine activities theory was originally applied narrowly to "direct-contact predatory offenses, when at least one person directly took or damaged the person or property of another" (Felson, 1998, p.43), it has been since extended to apply to a broad range of crimes (Felson, 1998; Forde & Kennedy, 1999). Overall, the theory is generally supported by the data (Cohen & Felson, 1979; Felson, 1998). There are some problems with measuring key concepts, and not all tests are equally supportive (Akers & Sellers, 2004; Meier & Miethe, 1993; Tittle, 1995). Nonetheless, routine activities theory remains one of the most

widely known and influential perspectives in contemporary criminology (Cullen & Agnew, 2006).

At the same time that Cohen and Felson (1979) were developing their theory, another group of scholars developed a very similar perspective called "lifestyle theory" (Hindelang et al., 1979). Based on the data from victimization surveys, they noticed that some people (such as young males) were at a higher risk for criminal victimization. So they formulated a theory of victimization that was grounded in data on victims of crime and centered around the concept of "lifestyle". Hindelang and colleagues (1978) defined lifestyle as "*routine daily activities, both vocational activities (work, school, keeping house, etc.) and leisure activities*" (p.241). They theorized that certain groups in society tended to pursue lifestyles (or using Cohen & Felson's terminology – routine activities) that increased their exposure to the risk of victimization (Garofalo, 1987). Similar to the routine activities theory, lifestyle approach argued that criminal acts were not merely a function of offenders, but also of the routines that people followed on a daily basis.

Hindelang and colleagues (1978) further explained that an individual lifestyle to a large extent is a function of two other key concepts of the theory – "role expectations" and "structural constraints", because an individual must adapt to these in order to effectively function within the society. Role expectations and structural constraints for an individual are defined by a combination of that individual's demographic characteristics, such as age, sex, race, income, marital status, education, occupation (Hindelang et al., 1978). The theory understood *role expectations* as "*cultural norms that are associated with achieved and ascribed statuses of individuals and that define preferred anticipated behaviors*" (Hindelang et al., 1978, p. 242). *Structural constraints*, on the other hand, were defined as "*limitations*

on behavioral options that result from the particular arrangements existing within various institutional orders, such as economic, familial, educational, and legal orders" (Hindelang et al., 1978, p. 242). Therefore, Hindelang and colleagues theorized that person's lifestyle is considerably limited by his/her coordinates within the social structure and role expectations that come with that position in the society. The theory also asserted that adapting to role expectations and structural constraints also involved acquisition of a certain set of skills and attitudes, including attitudes and beliefs about crime, including fear of crime. Once learned, these attitudes and beliefs often become incorporated into the routine activities of the individual, frequently as limitations of behavior (Hindelang et al., 1978).

Hindelang and colleagues (1978) also argued that role expectations and structural constraints have similar effects for people with the same demographic characteristics; therefore, shared adaptations also emerge and can be incorporated as norms among subgroups of society. In their model, lifestyle differences result from differences in role expectations, structural constraints, and individual and subcultural adaptations. Variations in lifestyle are related differentially to probabilities of being in particular places at particular times and coming into contact with persons who have particular characteristics. Hindelang and colleagues (1979) argued that criminal victimization was not randomly distributed; it is associated with lifestyle differences, which affect the level of exposure to situations that have high victimization risk.

Lifestyle theory put forth a proposition that lifestyle was directly linked to exposure to high victimization risk. But the model also theorized an indirect link between lifestyle and risk of victimization through associations. *Associations* referred to "*more or less sustained*

personal relationships among individuals that evolve as a result of similar lifestyles and interests shared by these individuals" (Hindelang et al., 1978, p. 245).

Based on lifestyle theory, personal victimization follows probabilistically from exposure to high victimization risk situations. One of the major premises of this approach postulates that relationships between demographic variables and a wide spectrum of consequences, particularly personal victimization, can be attributed to differences in lifestyle. Based on the model, the following lifestyle variables are especially relevant in predicting risk of victimization: amount of time a person spends in public places, especially at night, social contacts and interactions, extent to which the individual shares demographic characteristics with offenders, the proportion of time an individual spends among nonfamily members, the ability to isolate themselves from persons with offender characteristics, and the convenience, desirability and vulnerability of the person as a target for personal victimization (Hindelang et al., 1978).

Lifestyle theory provides an important theoretical foundation for the current analysis. This approach postulates that people belonging to the same subgroup or subculture within the society will have similar role expectations and structural constraints, which in turn will shape their lifestyle and consequently the level of risk for victimization, including the sexual victimization. Therefore, based on this approach, it is reasonable to expect that representatives of specific race-ethnic groups would share more norms of behavior, role expectations and structural constraints, and consequently exhibit similar risk levels for criminal victimization. The similarity of norms, attitudes and beliefs within the group depends to a large extent on how self-contained and cohesive the group is, and to what extent it is separated from the society at large. Lifestyle theory also suggests that subgroups or

subcultures that include large numbers of individuals with offender characteristics will suffer a higher risk of victimization due to exposure and association with individuals with offender characteristics. Therefore, theoretically, if a certain racial-ethnic group includes larger numbers of sexual predators, female members of this group will be at a higher risk for sexual victimization. Based on this theoretical foundation, studies and theories concerning the relationship between race, ethnicity and violent crime can provide important insights about the risk of violent victimization for women from various racial-ethnic groups that are relevant to the current research, notwithstanding the fact that the majority of these theoretical approaches and empirical studies focus on offending.

Routine activities and lifestyle theories provide sound theoretical explanations for a number of factors that have been empirically shown to correlate with the level of risk for rape and sexual assault victimization. These are factors of different natures, including but not limited to, demographic, social and environmental characteristics of potential victims that are likely to be relevant in relation to the risk of sexual victimization. The following section discusses some of these factors and relevant empirical evidence.

EMPIRICALLY SUPPORTED RISK FACTORS FOR RAPE AND SEXUAL ASSAULT

Extant studies clearly and consistently demonstrate that young women are at the greatest risk of non-lethal violent victimization (e.g. Lauritsen & Schaum, 2004; Kruttschnitt & Macmillan, 2006; Lauritsen & Rennison, 2006; Lauritsen, 2012). Findings from the NVAWS also indicate that for many rape victims, their first rape is experienced during childhood and adolescence (Tjaden & Thoennes, 2006). Based on the NVAWS results, a total of 54% of female victims are raped before their 18th birthday, with 32% being raped between the ages

of 12 and 17 (Tjaden & Thoennes, 2006; Fisher et al., 2008). Furthermore, research on different populations of women demonstrates that women with histories of childhood or adolescent sexual abuse are at an increased risk for subsequent sexual victimization during childhood (Fisher et al., 2008; Logan et al., 2006).

The reports by the Bureau of Justice Statistics also indicate that rates of rape/sexual assault are highest for young victims. For example, in 2010 the rates of rape/sexual assault were highest for victims age 12-17 and 21-24 years old (BJS, 2011). During the period 2005-2010, sexual violence was committed against females ages 12 to 34 at a rate of approximately 4 per 1,000 compared to a rate of 1.5 victimization per 1,000 for females ages 35 to 64 and 0.2 per 1,000 for age 65 or older (BJS, 2013). These data demonstrate that the rate of sexual violence against females declines with age, and such pattern is consistent across multiple years of NCVS data on rape and sexual assault, including the period from 1994 to 2010. NCVS data also indicate that since early 1990s, the rates of sexual victimization have been highest for females ages 12 to 17 (Lauritsen, 2012). Thus, *age* is a risk factor for rape victimization and should be controlled for in multivariate analyses. It also requires further study to see if there are possible differences in the significance of this and other risk factors for women from different race and ethnic backgrounds.

Another well-documented risk factor associated with violence against women is *marital status*. Reports by the Bureau of Justice Statistics (1994 -2013) provide evidence that divorced, separated and never married women are a lot more likely to be victims of any form of violence than married women. Based on the NCVS data for the time period 1994 to 2010, females who had never been married or who were divorced or separated at the time of the interview reported higher rates of rape or sexual assault victimization than females who were

married or widowed (BJS, 2013). The magnitude of differences in the risk of sexual

victimization between groups of females by marital status are quite large, especially in the

earlier part of the series (early 1990s) when rape rates for divorced/separated, and never

married women were particularly high, and similar in magnitude to one another (Lauritsen,

2012). In most recent years, NCVS rates of rape and sexual assault for married women

continue to remain lower compared to divorced/separated and never- married females

(Lauritsen, 2012). Lauritsen's (2012) analysis of the NCVS data for 1994-2009 also

underlined that marital status is the most enduring factor for the subgroup differences over

time. This analysis also demonstrated that divorced/separated women were more than 9 times

more likely to be victimized than married women in 1993-1997, and about 7 times more

likely in 2005-2009. Therefore, the general pattern that married women are at a lower risk for

violent victimization than divorced or never- married females remains consistent across

different time periods and is also supported by the findings in other studies (e.g. Dugan &

Apel, 2003).

There is accumulating evidence that *poverty* may also be associated with a higher risk of

violence against women. Such evidence comes from research using a number of data sources:

the National Violence Against Women Survey (Kruttschnitt & Macmillan, 2006; Tjaden &

Thoennes, 2006); the National Survey of Families and Households (Benson et al., 2003), and

the NCVS (Lauritsen & Scahum, 2004; Lauritsen & Rennison, 2006). Consistently across

multiple years of NCVS data (1994-2010), females living in households in the lowest income

bracket (less than $25,000 annually) experienced rape or sexual assault victimization at

higher rates than females in higher income brackets. In 2005-2010, females in households

with the total income less than $25,000 per year experienced 3.5 rape or sexual assault

victimizations per 1,000 females, compared to 1.9 per 1,000 in households earning between $25,000 and $49,999 and 1.8 per 1,000 in households with the total income of $ 50,000 or more per year (BJS, 2013).

In addition, one of the findings that have been consistently supported in the field is that *urban* residents are at higher risks of victimization than residents of other areas (e.g. Bachman, 1992; Lauritsen, 2001; Lauritsen & White, 2001; Dugan & Apel, 2003). Notwithstanding the fact that since the mid-1970s victimization declined in all types of locations, urban residents still remained the highest risk category for violence compared to urban and suburban residents (Bachman, 1992). In 1994-98, the rate of rape or sexual assault victimization for females living in urban areas (5.1 per 1,000) was higher than the rate for females in suburban (3.9 per 1,000) and rural (3.9 per 1,000) areas (U.S. Department of Justice, Bureau of Justice Statistics, 2013). However, based on the NCVS data, this pattern has reversed in more recent years. In 2005-2010, the rate of sexual violence for females in rural areas (3.0 per 1,000) was higher than the rate of sexual violence for females in urban (2.2 per 1,000) and suburban (1.8 per 1,000) areas (BJS, 2013).

In her report on the subpopulations at risk for rape and sexual assault, based on the NCVS data 1973-2009, Lauritsen (2012) also discusses this change. Lauritsen found that for most of the time series 1973-2009, females living in urban areas had demonstrated highest risk of sexual violence, and rates for those living in suburban and rural settings had been relatively comparable. However, in 2006, there was a noticeable increase in rural rates, which resulted in comparable rates of sexual violence for women in rural and urban areas. It should be noted, however, that this change may have come as a result of methodological changes in the administration of the NCVS in 2006. These changes involved changes in the survey mode

(from PAPI to CAPI) and new sample implementation which disproportionately affected rural areas (Lauritsen, 2012; Rand, 2008). Lauritsen (2012) also noted that with the exclusion of the 2006 increase, the average rape and sexual assault rates for urban, suburban, and rural areas for the period 2007 to 2009 were 1.8, 1.1, and 1.6, respectively, which suggests that the rates may be fairly comparable in urban and rural places. The NCVS data for 2010 and 2011 indicate that rates of total and serious violence are still highest in urban areas, compared to rural and suburban settings (U.S. Department of Justice, Bureau of Justice Statistics, 2012). Therefore, the change in the pattern by type of place may have been temporary and to a large extent due to the methodological changes in the administration of the survey.

Based on her analysis of the NCVS data for 1973 to 2009, Lauritsen (2012) concluded that place of residence may not be as highly associated with risk for rape and sexual assault as some of the other factors, such as marital status and age. In general, she found that for the entire series of data, the populations exhibiting highest rates of rape and sexual assault are divorced/separated, and never married women, younger females, non-Latina black females, and females living in households at/below the poverty line (Lauritsen, 2012).

Finally, studies also demonstrate that the risk for rape and sexual assault victimization varies *by race and ethnicity*. As I have previously mentioned, there are a limited number of studies focusing on the distribution of sexual victimization by race and ethnicity at the national level. These extant studies do demonstrate, however, that the prevalence/incidence of rape/sexual assault varies for women of different race and ethnic backgrounds. For example, in their analysis of the National Violence Against Women Survey data on rape, Tjaden and Thoennes (2006) found statistically significant differences in lifetime rape prevalence among women from specific race and ethnic backgrounds. They found that

American Indian/Alaska Native women were significantly more likely to be raped at any point in their lifetime than women from all other racial and ethnic backgrounds. Asian/Pacific Islander women were excluded from this analysis because the number of victims interviewed in that racial-ethnic category was too low to reliably estimate rape prevalence or conduct any statistical tests.

The finding that American Indian/Alaska Native women are at a higher risk for rape/sexual assault victimization than women of other racial and ethnic groups is confirmed by the NCVS data as well. The combined rates of rape and sexual assault victimization for 1992-2001 obtained from the Bureau of Justice Statistics show that American Indian and Alaska Native women are almost three times as likely to experience rape or sexual assault compared to either White, Black or Asian American women (Perry, 2004). Bachman and colleagues (2008), using NCVS data for 1992-2005, also confirmed that American Indian and Alaska Native women are more likely to be raped or sexually assaulted than either white or Black women. This study also analyzed some incident variables for rape and sexual assaults and found that American Indian and Alaska Native women were much more likely to be hit or injured during the commission of their sexual victimization as compared to all other women. The Bachman and colleagues' study did not include Hispanics as a separate category in the analysis, nor did they study estimated the prevalence of repeat victimization across the race and ethnic groups.

Based on the special report by BJS for 1994-2010, American Indian/Alaska Native women continued to represent the highest risk category for rape and sexual assault. Among the three largest racial-ethnic categories, rates were almost identical in the earlier years (1994-1998). However, in the period from 1999-2010, Black women exhibited the highest

rates for rape and sexual assault victimization (4.1 per 1,000 in 199-2004, and 2.8 per 1,000 in 2005-2010) compared to both White (3.1 per 1,000 and 2.2 per 1,000) and Hispanic women (1.8 per 1,000 and 1.4 per 1,000). Notably, Hispanic women demonstrate considerably lower rates of sexual victimization compared to both White and Black females.

In her report (2012), Lauritsen also identifies Black women as a subgroup exhibiting highest rates of rape and sexual assault than Hispanic and White women. She also reports that the rates of rape and sexual assault victimization tend to be slightly lower among Hispanic women compared to White. The trends for three major racial-ethnic subgroups have been fairly similar since the early 1990s, but the magnitude of subgroup differences in risk has varied periodically over the past four years.

Correlates for rape and sexual victimization that have been discussed so far represent sociodemographic characteristics of females. Other factors that are associated with the risk for sexual victimization belong to the behavioral or lifestyle domain. One of the most consistent findings is that alcohol or drug use is commonly present in rape incidents (Fisher et al., 2008). A large number of studies of college students and young adults have reported that roughly 50% of all rapes experienced involved alcohol use voluntarily or unknowingly consumed by the perpetrator, the victim, or both (Fisher et al., 2008; Testa & Parks, 1996; Testa et al., 2004). The role that alcohol use plays for males and females in a rape is not fully understood (Abbey et al., 2004). It may be the case that men who are drinking likely to dismiss women's cues of unwillingness and interpret friendly or ambiguous cues as signals for sexual interest and intent (Abbey et al., 2004; Fisher et al., 2008; Testa & Parks, 1996).

There is somewhat stronger supporting evidence linking women's substance use and their experience of sexual victimization. First, substance use impairs women's cognitive processing ability, which makes them more likely to miss or fail to recognize signs of sexual aggression and high-risk cues. Alcohol consumption also reduces women's cognitive and motor functioning, thereby reducing their ability to either verbally or physically resist rape (Abbey et al., 2004; Fisher et al., 2008). However, these findings are of limited value for this research because it is impossible to control for this risk factor using the NCVS data.

To sum up, there exists some consensus on the major risk factors for rape and sexual assault victimization for women. These risk factors include younger age, being never married or divorced/separated; residing in urban residence and/or in households at/below poverty level. Among the three largest racial-ethnic categories, Black women show the highest rates of rape and sexual assault, while Hispanic women show rates considerably lower than both White and Black females. The behavioral / lifestyle factor that has been consistently shown to affect the risk of sexual victimization is substance use, including drug and alcohol use both by the victim and/or the perpetrator.

RACE, ETHNICITY AND RISK FACTORS FOR VIOLENCE

"In the United States, the term "race" traditionally refers to skin pigmentation or color, whereas ethnicity refers to the countries from which a person's ancestors can be traced" (Sampson & Lauritsen, 1997, p. 313).

Historically, scholars have offered a variety of explanations of the race-violent crime relationship. Early approaches were biological in nature, and argued that violence was a consequence of physiological attributes. The basic idea is that groups with high levels of

violence function physiologically in a manner that predisposes them toward interpersonal violence (Ellis, 1990; Ellis & Walsh, 1997; Herrnstein & Murray, 1994). Some early explanations emphasized the purported innate inferiority of nonwhites, especially blacks' presumed childlike qualities and tendencies to "lawless impulse and weak inhibition" (Brearley, 1932; Hawkins, 1993; Peterson & Krivo, 2005). As these approaches did not yield any credible evidence to support the idea that racial-ethnic differences in violent offending are due to biological differences, researchers moved from these deterministic explanations towards theories emphasizing culture and/or social structure.

Cultural explanations argue that certain race and ethnic groups, for various reasons, are more likely to have norms and attitudes that promote or at least tolerate violence to settle conflicts (Lauritsen & Rennison, 2006). The basic premise behind the cultural difference paradigm is that value systems for specific groups, including racial-ethnic minorities, are qualitatively different from that of the larger society (Sutherland, 1934, Sellin, 1938, see Bruce & Roscigno, 2003 for review). This is, at least in part, explained by the disintegration of minority group institutions, such as family, religion, education, etc., which normally represent major agents of socialization. As a result, minority group members are less likely to learn conventional norms and values, including those condemning illegitimate forms of violence (Wolfgang & Ferracuti, 1967; Auletta, 1982). Instead, these disadvantaged groups develop an alternative normative and value system, referred to as the "subculture of violence". As a consequence, it is believed that members of these groups are more likely to use violence in their day-to-day encounters and resolve disputes through violence rather than through verbal negotiation or other more peaceful means, as well as identify a wider spectrum of situations as violence-worthy than it would be following the canons of the

mainstream culture (Wolfgang & Ferracuti, 1967; Gibbs, 1988; Bruce & Roscigno, 2003). These theories, however, do not account specifically for sexual violence.

The cultural difference paradigm has been criticized on the grounds that it assumes a unique subculture for a particular societal subgroup. This claim has been disputed by a number of scholars who argue that unique cultural tendencies are, in fact, manifestations of unique local structural conditions and general levels of opportunity (Taylor, 1979; Wilson, 1987; Anderson, 1990). Structurally oriented researchers have underlined the lack of community structural context, including such factors, as poverty level, unemployment, predominant family structure, etc. in purely cultural explanations of race, crime and violence (Hawkins, 1987; Sampson, 1987: Staples, 1986; Bruce & Roscigno, 2003). Fundamental structural attributes of a given locality, such as poverty and unemployment, are directly and undeniably linked to the breakdown of local institutions like families, churches and schools (Hawkins, 1987; Staples, 1986). In addition, the subculture of violence thesis has not been empirically validated with respect to race (Sampson & Lauritsen, 1997).

Among fairly recent scholars, Anderson (1999) provides a more in-depth theoretical explanation of the impact of culture on violence on the basis of ethnographic research in predominantly black, inner-city Philadelphia neighborhoods. Anderson (1994, 1999) recognizes the interconnections between cultural and structural contexts, and describes how the distinctive structural contexts encountered by Blacks foster cultural adaptations conducive to widespread crime and violence (South & Messner, 2000). He asserts that in response to social isolation and lack of trust or faith in the protective role of formal authorities within these disadvantaged areas, a code of the street emerges as a defensive mechanism. This code or oppositional culture is a set of informal rules that regulate public

behavior, particularly interpersonal violence. The rules of the code "regulate the use of violence and so supply a rationale allowing those who are inclined to aggression to precipitate violent encounters in an approved way (Anderson, 1999, p. 33). A central component of the code of the street is to provide a framework for negotiating respect and responding to being challenged.

Structural perspectives view group differences in crime and violence as resulting from differential socioeconomic conditions, such as poverty (see detailed review by Peterson & Krivo, 2005). The prominent early structural explanations that have heavily influenced subsequent research on race, ethnicity and crime are Merton's (1938) social structure and anomie thesis and Shaw & McKay's (1942) social disorganization perspective. Blau & Blau (1982) set the stage for much of the contemporary structurally-oriented research in their seminal paper on inequality and violent crime. They drew on Merton's (1938) argument that the disjuncture between cultural goals (economic success) and differentially accessible institutionalized means (socioeconomic opportunities) produces in the feelings of frustration and alienation, subsequently manifesting them in deviant behavior. In democratic societies, such as the United States, expressions of frustration through violent crime should be particularly pronounced when socioeconomic inequality is based on ascriptive characteristics, like race. In this context, ascriptive inequality is considered inappropriate, reinforcing ethnic and class differences, which can manifest themselves in aggressive behaviors, including criminal violence (Peterson & Krivo, 2005).

In their seminal paper (1995), Sampson and Wilson offered an integrated cultural-structural perspective to guide research on the race-violent crime link. Their integrated approach included aspects of structural transformation (Wilson, 1987), traditional social

disorganization (Kornhauser, 1978; Sampson & Groves, 1989; Shaw & McKay, 1942), and cultural adaptation (Anderson, 1978; Hannerz, 1969; see Peterson & Krivo, 2005). Sampson and Wilson (1995) argued that structural barriers and social isolation from conventional institutions, role models and normative structures result in cultural adaptations that "seem to legitimate or at least provide a basis for tolerance of crime and deviance" (Sampson & Wilson (1995), p. 50).

In his book *When Work Disappears: The World of the New Urban Poor* (1996), Wilson argues that changes in the socioeconomic structure of society may leave some geographic areas and groups of people severely disadvantaged, and thus, open for crime. In reaction to these structural hardships, these population groups may develop certain cultural notions and norms that help them adapt to the disadvantaged structural environment.

His unit of analysis is a neighborhood: mostly an impoverished ghetto. In his study, Wilson (1996) follows the idea that macro-level research should not strive to explain individual involvement in criminal behavior, but to isolate certain characteristics of communities, cities, or even societies that lead to high crime rates (Sampson & Groves, 1989). He believes that the anomie of the ghetto coincides with the process and the outcome of the social isolation of the ghetto, primarily through the loss of jobs by the residents of these neighborhoods as well as a result of racial segregation. Wilson (1996) argues that the ghettos were institutionally created. In his view, the creation of massive public housing projects in low-income areas in combination with systematic racial practices, such as redlining and various races-based zoning restrictions, should be held accountable for the existence of ghettos. Wilson (1996) argues that segregated ghettos are a lot less conducive to

employment and employment preparation than any other areas of the inner city, mostly because they have weak to none external social networks.

Wilson (1996) draws a striking picture of a vicious circle of joblessness and social isolation. Since the ghettos were created, they were becoming more and more isolated from the larger society. The structural changes in the society contributed to that: in the 70s, there was a dramatic decrease in low-skilled manufacturing jobs. From that point on, the jobs generally required higher levels of education, which caused a greater proportion of ghetto residents to be excluded from the labor market. The situation was exacerbated by the prejudice a majority of employers had towards Black candidates for employment. With time, more and more residents of the ghettos lost jobs and left the labor market completely. The absence of jobs immediately cut off the important ties with the larger society and eliminated a great deal of structure from the lives of the ghetto residents: they did not go to work, did not socialize outside their neighborhoods, and did not get the societal values reinforced. Social isolation practically eliminated any chances for ghetto residents to acquire social capital skills or education necessary for employment. So, in essence, there was a vicious cycle: joblessness contributed to social isolation as well as social isolation contributed to joblessness. Wilson also emphasizes that Blacks were the group that has been affected by these conditions the most.

It is also important to mention that joblessness and social isolation significantly weakened other social institutions, especially the family. The number of single-parent families is especially high in impoverished neighborhoods. One of the biggest reasons is that the males become unmarriageable. They are unemployed; thus, there is no stable structure in their lives − they cannot take care of the families. There is a mutual absence of desire to get married

shared both by males and females in these neighborhoods (Wilson, 1996). The weakening of the institution of the family deprives people of support systems, of another motivation to stay away from crime. Wilson's account also testifies to the fact that the residents of ghettos have a very low involvement with education.

Theoretical strategy in explaining the relationship between race and crime in the United States put forth by Sampson & Wilson (1995) is based on the premise that race and poverty are confounded in the United States (also Sampson & Lauritsen, 1997; Wilson, 1988; Land, McCall & Cohen, 1990). Blacks as a group are differentially exposed to criminogenic structural conditions, and "*the combination of urban poverty and family disruption concentrated by race is particularly severe*" (Sampson & Lauritsen, 1997, p. 336).

Collectively, more recent efforts to explain the race-crime relationship recognize the interconnections between cultural and structural factors (South & Messner, 2000). Cultural and structural foci inspired a number of race-specific theories, attempting to explain higher rates of violent crime among Blacks or African Americans. For example, Alvin Poussaint (1983) argues that institutional racism and the negative images that it projects of blackness have caused Blacks to internalize feelings of self-hatred for themselves because they are black and to hate and degrade other blacks for similar reasons (Poussaint, 1983; Comer, 1985; Covington, 2003). Institutional racism is thought to have resulted in fragile and frustrated ego of the Black man and a loss of self-respect, leading towards intense violent reaction to seemingly minor provocations (Covington, 2003).

Miller (2008) also argues that the society is responsible for having created the circumstances that put young Black women at heightened risk for gendered victimization by having perpetuated the structural conditions that lead to the cultural adaptations and

situational contexts affecting and patterning victimization risks for urban Black women. Based on her analysis, Miller (2008) concludes that violence against young Black women is tied to the persistent nature of gender inequality in our society, and is further exacerbated by the racial and class inequalities. Her findings echo Anderson's (1999) in the aspect that disadvantaged communities are male-dominated, and young men's constructions of masculine identity consist in "*keen attention to respect, violence, independence, and heterosexual prowess", which puts women "at greater risk for victimization*" (p. 197). Miller further emphasizes that structural inequalities "*are not simply based on the race and class inequalities that pattern ecological disadvantage; they are deeply gendered as well*" (p. 197).

Other race-specific approaches put forth similar arguments that historical and structural conditions have been crucial in the formation of the black subculture, characterized by heightened sensitivity to any threats to their personal autonomy (Curtis, 1975), the concept of compulsive masculinity (Oliver, 1994), and angry aggression fueled by their suspension in a nearly chronic state of physiological arousal (Bernard, 1990; Covington, 2003).

The vast majority of race-specific theories and studies on the link between race, ethnicity and violence in general have been focused on the longstanding division between blacks and whites in the United States. With time, researchers have recognized the need to go beyond just the black / white dichotomy in the study of crime and the focus began to gradually expand to include other racial and ethnic groups, such as Latinos. The major direction in this research has been to evaluate whether the structural conditions relevant for black and white violence also apply to Latinos. However, research on populations other than whites and blacks is quite scarce and limited primarily to homicide (Peterson & Krivo, 2005). They demonstrate that lethal violence is lower for Latinos and various immigrant groups (e.g.,

54

Haitians, Mariel Cubans) than for similarly disadvantaged African Americans. Martinez (1997, 2003) suggests that Latino barrios may be different from African American ghettos in terms of social integration through labor market attachment, historical racism and discrimination (Peterson & Krivo, 2005).

Another emerging trend in the research on racial-ethnic differences in violence is the incorporation of macro level structural factors into multilevel models. To date, the majority of the studies on the topic have been conducted at the macro level, but in the 1990s-early 2000s studies based on multilevel research designs increasingly began to appear in the criminological literature (Elliott et al, 1996; Miethe & McDowall, 1993; South & Messner, 2000). These studies combine data on aggregate level variables with individual characteristics, thereby permitting assessments of the main effects of aggregate context along with the net effects of individual-level predictors, controlling for contextual factors (South & Messner, 2000; Peterson & Krivo, 2005). They also permit assessments of whether the effects of individual-level predictors vary across social contexts.

Another paradigm of thinking that has been introduced in the recent years and is applicable to multilevel and multidimensional understanding of race and crime relationship is that of intersectionality. The concept of "intersectionality" was first introduced by Crenshaw in 1980s, and since then has been gaining more and more popularity in a number of disciplines. In most general terms, intersectionality stands for understanding reality from more than a single angle of vision, embodying dynamic approach to reality (MacKinnon, 2013). At the same time, intersectionality presupposes *remaining grounded in the experiences of classes of people within hierarchical relations "where system of race, gender, and class domination converge," criticizing a rigidly top-down social and political order*

from the perspective of the bottom up" (MacKannon 2013, p. 1020, citing Crenshaw 1991, 1246). Intersectionality focuses awareness on people and experiences – and consequently, on the social forces and dynamics, which are overlooked in monocular vision. It specifically focuses on those points where vectors of inequality intersect. In that, intersectionality "*reveals women of color at the center of overlapping systems of subordination*" (MacKannon 2013, p. 1020). On this level, it addresses "*the combined effects of practices which discriminate on the basis of race and the basis of sex*" (MacKannon 2013, p. 1020, citing Crenshaw 1989, 149). "As a categorical corrective, intersectionality adds the specificity of sex and gender to race and ethnicity, and racial-ethnic specificity to sex and gender" (MacKannon 2013, p. 1020).

   The valuable contribution of this conceptual paradigm for the present research is in the idea of interconnectivity of such sociodemographic dimensions as race and ethnicity and gender in their effects on the life experiences of individuals within these groups. This paradigm channels the scientific inquiry away from a monocular approach or focusing on a single parameter towards looking at the reality with the appreciation of its complexity and highly multi-faceted and intertwined nature.

   The following inferences relevant to the current study can be drawn, based on the aforementioned body of research. Even though racial and ethnic identity may not constitute a distinct cause for violence, it may be conceptualized as a marker for differential structural and cultural contexts relevant to the understanding of differential levels of the risk for violent victimization among women from racial-ethnic groups. In particular, minority status itself may be indicative of higher risk for violence associated with specific ecological distributions and concentrated disadvantage for minority populations. A number of race-specific theories

argue that historic racial and economic discrimination in the larger society is responsible for the particular characteristics of the Black culture associated with a lower threshold for violence. It stands to reason that a similar rationale can be applied to other minority groups, since all racial minorities have been subject to various levels of racial discrimination throughout American history (Jang, 2002). Thus to the extent that these cultural and structural explanations are relevant to the understanding of rape and sexual violence, we should by definition expect higher levels of violent crime and victimization among minority subpopulations compared to the white majority.

Some scholars identify racism and racial discrimination as an explanation for domestic and specifically sexual domestic violence among Blacks and other minority groups (e.g.: Burns, 1986; Koss et al., 1994; Gilroy, 1993; Harper, 1996). Domestic violence is viewed as a maladaptive, but compensatory, response to social and economic pressures that deny black males the opportunity accorded to their white counterparts and breed self-contempt (Stark, 2003, p. 191; Hampton & Yung, 1996). In response to these pressures, some Black males resort to sexual dominance as an alternative "route to manhood". According to Sanchez-Hucles and Dutton (1995), "practices of cultural violence and control that have been perpetuated against people of color become internalized and acted out within these communities" (p.202). Following this rationale and assuming that most rapes and sexual assaults are intra-racial[1], we should expect membership in a minority racial-ethnic group to be associated with a higher risk for rape and sexual assault victimization. For the purposes of the current study this argument suggests that we should expect rates of rape and sexual

---

[1] This assumption is supported by the NCVS data used in this research. In 76% rape and sexual assault incidents involving a White female victim, the offender was White; in 89% of incidents involving a Black female victim, the offender was Black. The information is unavailable on the incidents involving Hispanic victims because NCVS only records offender race as White, Black, or Other.

assault victimization to be significantly higher among Black and Hispanic women by virtue of the fact that these women represent minority populations in American society. It is also reasonable to expect Black women to exhibit a higher risk of rape and sexual assault victimization among the two minority subpopulations because they have had both the long history of being discriminated against in the United States, and this discrimination has arguably been most severe among all minority groups. It should be noted, however, that I am unaware of any literature discussing measurable indicators for comparison of the levels and magnitudes of discrimination against various population groups.

In order to make more refined predictions based on the above literature and relevant to the current analysis, it is necessary to consider other risk factors for violence as they apply to the named minority subpopulations. Socioeconomic status is a major structural predictor of the risk of violent victimization (Sampson & Lauritsen, 1994; Bachman & Saltzman, 1995; Lauritsen & White, 2001; Cunradi, Caetano & Schafer, 2002; Benson et al, 2003; Frias & Angel, 2005). Research studies indicate that Black and Hispanic women are at elevated risk of chronic poverty, which creates stress that can place minority women at elevated risk of violence (Benson, Fox, Demaris, & Van Wyk, 2000; Frias & Angel, 2005). Poverty statistics draw a similar picture. Based on the data from the U.S. Census Bureau, Current Population Survey, 2009 and 2010 Annual Social Supplements, in 2009 9.4% of Whites, 25.3% Hispanics, and 25.8% Blacks were living in poverty. Other research studies show that among racial-ethnic groups, Black children were more likely to be living in poverty, with young, never married mothers, and a large number of siblings (Farrington et al., 2003). Some of these indicators provide evidence of the closing gap between Hispanic and Black subpopulations.

Family structure and stability is also an important structural factor relevant for explaining the risk of violent victimization. Landale and Oropesa (2004) discuss statistics on family structures by race and ethnicity based on the data from the Current Population Survey (March Supplement 1998, 2000, 2002). Based on these data, African Americans exhibit lowest rate of married adults (34%), and highest rates of divorced (9.9%), separated (4.6%) and never married (41%) persons. Hispanics also demonstrate relatively high rates of divorce (6.1%) and marital separation (3.5%).

Studies suggest that immigrant status may also be relevant in estimating risk for violent victimization (Frias & Angel, 2005 among others). Research including immigrants shows that acceptance of violence towards women may be inherent for the subcultures within the American society in which immigrant populations incorporate (Kaufman, Kantor et al, 1994). Factors related towards immigrant and citizenship status influence levels of stress and economic opportunity, hence increasing risks for violence (Frias & Angel, 2005). Hispanic subpopulations have proportionately the highest numbers of recent immigrants. Based on the data from U.S. Department of Homeland Security, in 2002, nearly 42% of the persons that were granted permanent resident status were from Latin America and the Caribbean (Oropesa & Landale, 2004). Thus, if certain factors associated with the immigrant status are related to violence against women, Hispanic women should be at an elevated risk for violence, especially partner violence, compared to other racial-ethnic groups.

Overall, based on the aforementioned cultural and structural risk factors for violent victimization, Black and Hispanic women should be more likely to experience a higher risk of violent victimization. However, this is only the first hypothesis for the current analysis. So far, I have only considered general risk factors for violent victimization, applicable to all

59

violent crimes, of both a sexual and nonsexual nature. It is necessary to address the factors that make rape and sexual assault different from other violent crimes and discuss risk factors that may be specifically related to the risk of sexual victimization.

RISK FACTORS FOR SEXUAL VICTIMIZATION

The earliest theories of rape, in the 1950s and 1960s, came from psychiatry, and viewed rape as perpetrated by sick individuals who were considered different from men in general and whose behavior reflected mental illness and irresistible impulses as a function of personality, adjustment or biochemical abnormalities (Jones, 1999). Rape received increased scholarly attention outside psychiatric circles only in 1970s, when Susan Brownmiller's Against Our Will (1975) brought women's experiences to the forefront and made rape an important subject socially, legally and academically. Brownmiller's work also catalyzed a diverse collection of perspectives on rape, loosely termed 'the feminist perspectives' (Jones, 1999).

Feminist perspectives on rape have both large and subtle differences, but it is still possible to identify common threads between them. The majority of them stem from the central notion that rape results from: 1) social traditions that reflect male power and dominance, on one hand, and female powerlessness and exploitation, on the other; 2) socially stratified and unequal gender roles; and 3) cultural attitudes and assumptions among men, women, and rape (Ward, 1995; Jones, 1999). In this view, patriarchal culture socializes males to be potential rapists, and rape is to a large extent reconceptualized from a "sex" crime (motivated by sexual desire) to a "violent" crime (motivated by misogyny) (Sanders, 1980).

According to Whaley (2001), rape is associated with gender inequality in society; and the interconnection between rape and gender inequality can be traced on multiple levels. The first level is the level of cognitive schemas associated with the gender roles and interactions common for males in the society or a given culture. Studies focusing on cognitive schemas and/or distortions associated with rapists and sex offenders can shed light on what motivates such perpetrators to offend. Based on the interviews and questionnaires of convicted rapists, Polaschek et al (2004) develop five major cognitive schemas most commonly associated with the rapist's mind. Rapists believe that women are unknowable (i.e. men cannot fully understand how women's mind works). Rapists also see women as sex objects, who are constantly sexually receptive. The third schema is reflected in the belief that male sex drive is uncontrollable – it cannot and should not be controlled. This is closely interrelated with the fourth schema – the one of entitlement, according to which men are entitled to satisfy their (sexual) needs. Finally, rapists believe that the world is dangerous and one should constantly guard him/herself to avoid being attacked or victimized in any way. The research also points out consistently that suspiciousness, distrust, and hostility to women is the key cognitive schema associated with the rapist's mindset (Milner &Webster 2005; Ward et al 1995).

The beliefs that rapists might have about women are hypothesized to be rooted in the underlying assumption that women are fundamentally different from men, and thus, should be treated differently. The question is differently how? Based on the research, this seemingly harmless idea gets distorted in the rapist's mind and turns into motivation to hurt or subdue (Polaschek et al, 2004). Certain parallels can be traced between the cognitive schemas associated with the rapist's mindset and some aspects of the traditional values related to gender relations. Traditional or patriarchal beliefs draw a sharp distinction between male and

female gender roles, thus, promoting the idea of the fundamental difference between men and women. Traditional beliefs are associated with strictly defined gender roles (Feldberg & Glenn, 1979; Spade, 1989): men are breadwinners, while a woman's place is in the house taking care of the children; hence, women are deprived of any choice in the matter. Some of the cognitive schemas associated with rape may reflect some of the aspects in the traditional beliefs. For instance, the schema of entitlement or seeing women as sex objects is connected to the belief that men are in charge of women and have the right to control them. Thus, it can be hypothesized that when traditional patriarchal beliefs are dominant in the society, rape should be more prevalent because no matter what women want or feel, men are entitled to have their needs met and women should obey. Traditional patriarchal ideas that had long determined gender roles in American society put women in a position that is inferior to men (Sanday, 1996). According to these beliefs, men are in charge and women should obey men and respect them, though reciprocity is not required. These beliefs about cultural gender inequality may also translate into structural gender inequality, in terms of jobs, wages and salaries, social statuses that are differentially available and accessible for men and for women. Researchers connect structural gender inequality in the society with the prevalence of rape (Whaley, 2001; Miller, 2008), because it supports the belief that men are superior to women. More importantly, structural inequality limits opportunities for women to be economically self-sufficient and to be able to provide for themselves and their children. This makes women highly dependent on men, which deprives women of the freedom to pursue their interests and to improve their status both at home and in the society (Kane & Sanchez, 1994).

It should be noted, however, that the status of women in the United States has changed in important ways within the last several decades (Xie, Heimer, & Lauritsen, 2012). These changes involved considerable gains in women's labor force participation, narrowing of the wage gap between men and women, and significant increases in women's political participation (Xie, Heimer & Lauritsen, 2012). However, there is no consensus among criminologists and other researchers how these changes in the labor force and political participation of women, resulting in considerable gains in economic and social well-being of women, have influenced women's vulnerability to violent victimization. Research findings on the topic have been contradictory (Xie, Heimer, & Lauritsen, 2012).

Theory and research findings put forth evidence to the potential positive as well as negative consequences of the gains in status for women (Xie, Heimer, & Lauritsen, 2012). One argument is that an improved status of women, both economic and political, has resulted in lower rates of victimization among women, (Bailey & Peterson, 1995; Vieraitis et al., 2008; Whaley & Messner, 2002, Xie, Heimer, & Lauritsen, 2012). Whaley and Messner (2002) refer to this perspective as the ameliorative hypothesis, and the major premise of this approach is that violence is socially acceptable in patriarchal societies where women have lower social status relative to men; therefore, reductions in gender inequality should result in lower levels of violence against women (Dobash & Dobash, 1979; Martin, 1976; Xie, Heimer, & Lauritsen, 2012). The ameliorative hypothesis has been tested based on the study of rape (Baron & Straus, 1987), domestic abuse (Straus, 1994), and intimate partner homicide with mixed results (Brewer & Smith, 1995; Dugan et al., 1999; Linsky et al., 1995; Peterson & Bailey, 1992; Vieraitis et al., 2007, Whaley, 2001; Xie, Heimer, & Lauritsen, 2012). In contrast, other researchers have argued that improvements in women's status may

have increased women's risk for victimization. This explanation is referred to as "the backlash hypothesis" (Morash 2005, Whaley 2001). According to this model, as women are acquiring higher status in the society, as they are getting more freedom and opportunities, as they are becoming more equal to men, both in terms of social culture and structure, they are meeting stronger resistance from men who are disinclined to lose their power to women. This resistance is translated into various forms of aggressive behavior by men towards women, including rape. Russel (1975), for example, theorized that closing the status gap between women and men may have been threatening to men, and as a result, violence against women may have increased due to the "backlash" effect (Bailey, 1999; DeWees & Parker, 2003; LaFree & Hunnicutt, 2006; Whaley & Messner, 2002; Xie, Heimer, & Lauritsen, 2012). Another theory somewhat logically similar to the backlash hypothesis is a power-control theory by O'Brian (1991), which is based on Guttentag and Secord's (1983) hypothesis that sex ratios affect gender roles in the society through the dyadic power of men and Cullen and Felson's (1979) routine activities approach. According to power-control theory, when sex ratios (men to women) are high, rape rates are low. The rationale behind this idea is that men use their power to protect and control women, and compel them to take on traditional gender roles, hence, women spend more time at home where they are guarded.

To sum up, feminist perspectives on rape connect it with the structure of gender roles and level of gender inequality on multiple levels, and this view has had some theoretical and empirical support. Sociologists, for their part, also concurred with feminists (Jones, 1999). Also, their primary focus in terms of rape research lies with the contexts in which rape occurs rather than rapists' motivations (see Jones, 1999 for review). From the sociological point of view, rape is typically a product not of individual pathology, but of collective cultural

determination (Amir, 1971). In this view, "social conditions, such as cultural norms, rules, and prevailing attitudes about sex, mold and structure the behavior of the rapist within the context of the broader social system fostering rape-prone environments and, in effect, teaching men to rape" (Jones, 1999, p. 840). Researchers have also begun to specify the characteristics of particular social contexts in which the risk for sexual violence is especially heightened. One of such characteristics is "male-dominated settings, with the valorization of narrow conceptualizations of masculinity – those that reward aggression, competition, and the devaluation and mistreatment of women (Miller, 2008, p. 5).

This idea may be relevant to the understanding of the link between race and ethnicity and sexual victimization because, if rape is viewed as a culturally determined behavior shaped by specific cultural environments, it may be the case that cultural norms and attitudes specific to racial-ethnic subpopulations vary, affecting the risk of rape and sexual assault among these groups. On these grounds, below I discuss some of the available literature on cultural norms and structure of gender relations for Hispanic, Black and White racial-ethnic groups.

Traditional Hispanic cultural values that influence gender and sexual relationships include the cultural concepts of machismo and marianismo, familism, personalismo, and simpatia (Alvarez, Bean & Williams, 1981; Falicov, 1984; Pavich, 1986, Chong & Baez, 2005). Machismo refers to aspects of gender role socialization emphasizing family responsibility and honor for men, while marianismo embodies women's traditional roles of caregiving, virginity, and obedience to men (Alvarez et al 1981; Pavich, 1986; Upchurch et al., 2001, Sprecher & Reis, 2009). Familism, personalismo, and simpatia refer to the cultural values stressing the importance of family life and interdependent relations between the individual, family, and community (Alvarez et al 1981; Pavich, 1986; Upchurch et al., 2001, Sprecher &

Reis, 2009). For Hispanic teens, machismo and marianismo are important aspects of gender role socialization, with girls subject to more prescriptive norms and values regarding sexual conduct (Upchurch et al., 2001). Hispanics adhere to traditional gender role attitudes regarding virginity, children, and the relationship between love and marriage (Marin et al., 1993; Padilla & Baird, 1991; Upchurch et al., 2001). There is an obvious sexual double standard related to sexual conduct for girls and boys, manifesting itself behaviorally in older ages of first sex for girls (Ford & Norris, 1993; Marchi & Guendelman, 1995; Upchurch et al, 1998; Upchurch et al., 2001).

The cultural ethos of familism and pro-family values emphasize the preeminence of the family in shaping Hispanic youths' development, values, and beliefs (Upchurch et al., 2001; Chong & Baez, 2005; Sprecher & Reis, 2009). Thus, the family is the strongest socializing agent for the traditional values and norms associated with gender roles for Hispanics. However, the sociocultural contexts for Hispanics are shaped not only by Hispanic cultural values, but also by the mainstream American culture through the process of acculturation (Flores et al., 1998; Marin et al., 1987; Upchurch et al., 2001; Sprecher & Reis, 2009). Hispanic cultural norms are likely to be strongest in families where both generations are less acculturated adding to the degree of congruence in attitudes between parents and teens (Thornton & Camburn, 1987). Thus, the ethnic concentration of the neighborhood is also an important factor affecting clarity and consensus among norms and values (Burton et al, 1997; Jarrett, 1997; Upchurch et al., 2001). As mentioned earlier, Hispanics are one of the groups with the highest proportion of recent immigrants, which suggests that there are a significant number of Hispanics who are less acculturated, thus, exhibiting strong inherence towards traditional Hispanic attitudes about gender and sexual behavior and relationships.

It should be noted, however, that second- and third-generation Latinos are more likely to marry outside their group – in some cases, that means other Latino groups (ex.: Mexicans and Puerto Ricans) and across groups. US-born Latinos also adopt a more egalitarian gender division of labor, but that is also shaped by social class differences. In general, there is much diversity in the Latino/Latina experiences resulting from key social processes such as globalization and migration (Sprecher & Reis, 2009).

At the same time, the counseling literature provides some interesting insights about culturally-oriented counseling practices for Latinos. This literature emphasizes that Latinos/Latinas still strongly adhere to the value of *simpatia*, which includes promoting social relationships that are pleasant and without conflict, and *persanolismo*, which is defined "*as a valuing of connectedness with others and basing these connections on trust*" (Fraga 2008, p. 1196.). These values may potentially affect the willingness of women to report their victimization experiences. Fraga (2008) also states that both *machismo* and *marianismo* are still significant factors, in which Latinos/Latinas develop a sense of identity; and *marianismo* pertains to the expectation that "*women aspire to be like Virgin Mary by acquiring the characteristics of humbleness, self-sacrifice, and othercenteredness*" (Fraga 2008, p. 1196). Overall, there seems to be a sizable proportion of the Hispanic population that adheres to traditional values and ideas about gender roles.

Compared to other racial-ethnic subpopulations, a greater array of studies is available comparing and contrasting gender role attitudes and practices between White and Black subpopulations. However, the findings in such studies are highly inconsistent (see Kane, 2000 for a detailed review). A number of studies comparing the two groups note no significant racial differences in role-related attitudes, whether among men only (Wilkie,

1993), women only (Marshall, 1990; Ransford & Miller, 1983, and others), or both men and women (Kane, 1998; Kluegel & Smith, 1986). At the same time, other investigations find some intriguing racial differences. Whites appear more critical of maternal employment than Blacks, seeing paid employment as less compatible with the role of wife/mother and as more harmful to children (Kane 2000 citing Bielby & Bielby, 1984; Dugger, 1988; Rice & Coats, 1995; and others). In addition, some studies using indices that combine a number of gender-role attitude items that refer to both home and employment, find that Blacks are sometimes more egalitarian than whites (Fulenwider, 1980; Harris &Firestone, 1998; Mason & Bumpass, 1975; Hatchett & Quick, 1983; Hunter & Sellers, 1998). Yet, a number of other studies argue that on some other dimensions, especially some more closely tied to family life or to leadership, Blacks appear to be more traditional than whites in their gender role attitudes (Kane, 2000 citing Blee & Tickamyer, 1995; Ransford & Miller, 1983; Rice & Coats, 1995). Overall, this set of findings suggests no clear pattern (Kane, 2000), which may indicate that African Americans are less concerned about gender inequality than whites and/or that African American men may be invested in gender inequality as a source of at least some compensation for the disadvantage they suffer as a result of racial discrimination (Kane, 2000). Based on this body of research, it is hard to make predictions about the risk of sexual violence for Black females. However, there are other findings about certain aspects of Black culture that are less inconsistent and make it reasonable to expect an elevated risk for sexual violence for this racial-ethnic group.

I have already touched upon these characteristics in part when discussing race-specific theories linking race and violence. Research studies on the topic frequently conclude that Blacks, more than other racial ethnic groups, tend to exhibit exaggerated and accentuated

masculinity and aggression (Curtis, 1975; Oliver, 1994; Covington, 2003; Miller, 2008 and many others). These discussions indicate that status and respect are inherently linked with increased assertiveness and readiness to use violence to resolve even seemingly insignificant disputes. However, it is not clearly determined what proportion of Blacks actually share these cultural norms and values. Also, it is possible that these values are not directly linked to the Black culture per se, but to structural conditions that many Blacks find themselves in, such as social isolation and poverty; and thus, these cultural values may be only spuriously associated with the elevated risk of all forms of violence. Overall, at this point, the evidence supports the expectation that compared to the two other racial-ethnic subpopulations, Black females appear to face a greater risk for rape and sexual violence and victimization.

Table 2.1: Female Labor Force Participation (20 years of age and older) by Race and ethnicity.

Year	% Female Labor Force Participation by Race and ethnicity		
	White	**Black**	**Hispanic**
2001	60.5	65.2	59.8
2002	59.8	65.0	59.5
2003	59.9	64.0	58.3
2004	59.5	64.0	57.8
2005	59.7	64.2	57.5
2006	59.9	64.6	58.5
2007	60.2	64.3	58.5
2008	60.4	64.4	58.5
2009	60.7	63.3	59.1
2010	59.3	63.2	59.7

Source: Bureau of Labor Statistics, Current Population Survey.

As it has been mentioned earlier, another type of evidence that may be helpful in refining predictions for the level of sexual victimization by race and ethnicity are measures of gender equality or lack thereof within these racial-ethnic groups. Data from the Current Population

Survey on female labor force participation by race and ethnicity for 2001-2010 (U.S. Bureau

of Labor Statistics, 2012) and women's earnings as a percentage of men's by race and

ethnicity 1994-2008 (U.S. Bureau of Labor Statistics, 2009) are presented in Table 1 and 2.

Table 2.2: Women's Earnings as a Percentage of Men's, by Race and Ethnicity, 1994-2008[2].

Year	Women's Earnings as a Percent of Men's			
	Total	**White**	**Black**	**Hispanic**
1994	76.4	74.6	86.5	88.9
1995	75.5	73.3	86.4	87.1
1996	75.0	73.8	87.9	88.8
1997	74.4	74.6	86.8	85.7
1998	76.3	76.1	85.5	86.4
1999	76.5	75.7	83.8	85.7
2000	76.9	75.8	84.1	87.8
2001	76.4	75.8	85.8	88.2
2002	77.9	77.9	90.3	88.0
2003	79.4	79.3	88.5	88.4
2004	80.4	79.8	88.8	87.3
2005	81.0	80.2	89.3	87.7
2006	80.8	80.0	87.8	87.1
2007	80.2	79.4	88.8	91.0
2008	79.9	79.3	89.4	89.6

Source: U.S. Bureau of Labor Statistics, Current Population Survey.

Based on the statistics for the labor force participation, Black women demonstrate the

highest labor force involvement during the entire data series. White and Hispanic women

exhibit comparable levels of work participation throughout, with Hispanic women

consistently demonstrating the lowest labor force participation among the three racial-ethnic

categories, though the differences are small in magnitude. Following the rationale of the

---

[2] The comparability of historical labor force data has been affected at various times by methodological and conceptual changes in the Current Population Survey. Beginning in 2003, estimates for the race groups (white, Black or African-American, and Asian) include persons who selected this race group only; persons who selected more than one race group are not included. Prior to 2003, persons who reported more than one race were included in the group they identified as the main race.

backlash hypothesis, these data would predict the highest victimization risk for Black women and the lowest victimization risk for Hispanic women. This kind of prediction, based on the data, is also supported by the routine activities and lifestyle theories, because women who work outside the home suffer higher risk for criminal victimization simply by virtue of the fact that they spend more time outside the home, in a public place with nonfamily members and are potentially exposed to larger numbers of people with offender characteristics. However, according to the ameliorative perspectives, these predictions would be reversed, and low labor force participation of Hispanic women compared to White and Black subgroups would constitute a risk factor for sexual victimization for this racial-ethnic category of women.

Data on women's earnings as a percentage of men's by race and ethnicity for 1994-2008 (Table 2) also adds valuable information to allow predictions regarding the risk of victimization for women of these racial-ethnic groups. The data show that for the most part of the time series (with the exception of six years: 1997, 2002, 2003, 2004, 2005, and 2006), of the three races-ethnic subgroups, Hispanic women have been exhibiting the narrowest wage gap with Hispanic men. Black women showed the highest numbers in those six years, while for the rest of the series, they have been occupying a solid second place among the three racial-ethnic categories consistently demonstrating numbers considerably higher than white women, the numbers that are comparable to those of the Hispanic female population. Based on this indicator, white women exhibit the least amount of wage equality with men throughout the entire series with multiple years were white women showed numbers below average among all racial-ethnic categories. Based on these data, varying predictions can be made, depending on the framework. Following the ameliorative hypothesis, these numbers

would indicate that Hispanic women have the lowest risk of violent victimization, while the risk is highest for white women. However, based on the backlash framework, reverse predictions should be made. Hispanic and Black women should be at high risk of violent victimization, while the risk for white women is the lowest. At this point, it is impossible to say with certainty which direction is correct. However, considering insights provided earlier by lifestyle approach and labor force participation data, predictions based on the backlash hypotheses seem more promising.

IMPLICATIONS OF PREVIOUS RESEARCH FOR THE CURRENT STUDY

As I mentioned earlier, at the present time, there is no such theory or conceptual paradigm in criminology or sociology that would be able to comprehensively explain all underlying mechanisms and schemes of interconnections between race and ethnicity and risk of victimization in general, and more narrowly for sexual victimization. However, the existing conceptualizations and theoretical approaches make it possible to form certain expectations and predictions about the mechanisms mediating this relationship.

Firstly, a sound theoretical strategy for explaining the link between race, ethnicity and sexual victimization can be informed to a large extent by works of Sampson & Wilson (1995), Sampson & Lauritsen (1997), Wilson (1988) and other scholars who recognize the interconnections between structural and cultural factors. One of the key premises associated with such theoretical strategy is understanding of the fact that contextual factors contribute to racial and ethnic differences in sexual victimization (as well as other types of violent victimization), and clustering of contextual factors varies across racial-ethnic subgroups. Differential positions with respect to such contextual factors, as poverty, concentration in

urban areas, a weakened institution of family, and other factors associated with concentrated disadvantage, are well-documented for White and Black racial-ethnic categories (Sampson, 1987; Sullivan, 1989; Sampson & Lauritsen, 1997). The information about the status of Hispanics compared to White and Black subgroups is limited, but available data seem to be indicative of similarities between Hispanic and Black racial-ethnic subgroups from the point of view of structural disadvantage associated with minority status within the American society.

High level of exposure to contextual factors may result in specific cultural adaptations for certain subgroups. Cultural influences may be triggered by structural features of the urban environment (Sampson & Lauritsen, 1997). Prior research provides evidence of such adaptations for Blacks: "code of the street" (Anderson, 1999), culture of un-marriageability (Wilson, 1996), a culture promoting rape and violence (Miller, 2008). Based on multiple theoretical approaches, Black culture appears to be more closely associated with such concepts as masculinity, status and aggressiveness, and norms conducive to sexual violence.

Thus, based on these important insights provided by the previous scholarly inquiry, it is reasonable to expect such predictor factors as poverty, urban residence, and being never married or divorced (or separated) to be instrumental in accounting for some of the racial-ethnic differences in the levels of sexual victimization.

Also, based on prior research and empirical findings, age is an important factor that is highly relevant in predicting and explaining levels of risk for violent victimization in general and sexual victimization in particular. Since, in this study, I compare racial-ethnic groups (i.e. aggregate units) and not individuals, age is relevant as a measure for a compositional

effect which may also vary across the subgroups, subsequently exerting differential effects on the level of risk for sexual victimization.

As a result, based on close examination of the previous scholarly literature on the issue, I include the following measures into my analysis: age, marital status, place of residence, poverty, and violent victimization. One of important limitations of the current study is the impossibility to include measures of community and neighborhood context into the analyses as these measures are of the highest relevance as controls for contextual effects. In this respect, the measure of violent victimization (other than rape and sexual assault) represents an important proxy for conditions of varied nature associated with high risk of violent victimization, including ecological conditions of community and neighborhood disorganization.

Lifestyle and routine activities theories also provide relevant insights for the present research. First, the "principle of homogamy" in lifestyle theory states that persons are more likely to be victimized if they disproportionately associate with, or come into contact with, members of demographic groups that contain a disproportionate share of offenders (Hindelang, Gottfredson, & Garofalo, 1978, p.p. 256-57). Based on this premise, it is possible to predict highest risk of sexual victimization for Black women, since they associate with higher numbers of potential violent offenders. Second, based on the previous discussion and using the language of the Lifestyle approach (Hindelang et al., 1978), there are grounds to conceptualize racial-ethnic groups as subgroups "characterized by differential attributes of their combined cultural and structural position within the society". These cultural and structural factors may result in distinct lifestyle characteristics for the members of racial-ethnic groups, which may, in turn, result in different levels of the risk for victimization in

general and, narrowly, for sexual victimization by race and ethnicity. Previously discussed empirical data testify to the fact that Hispanic women have lowest labor force participation among the three racial-ethnic groups. This indicator, coupled with data on prevailing traditional beliefs about gender roles for this subgroup, provides evidence that Hispanic women may spend more time at home focusing on their roles as wives and mothers, compared to the other two groups of women. According to the premises of both lifestyle and routine activities approaches, family-oriented lifestyle is much safer than the alternative by virtue of the fact that it is more closely associated with the safety of one's home and lower exposure to potential motivated offenders. Also, married women have a lower indirect risk of victimization through associations with potential offenders compared to single women who are more likely to date and be in search of a partner. Finally, lifestyle and routine activities put forth theoretical strategies that can be used to explain the underlying mechanisms for the effects of various predictors on the risk of rape and sexual assault victimization. For example, the explanation why young age is a strong risk factor for violent victimization can be derived from these theories. Young people by virtue of certain characteristics of their lifestyle are more likely to spend much time away from home and to date, and, as a result, are at a higher risk of running into motivated offenders in the absence of a capable guardian. They are also at high risk of victimization through associations with potential offenders. Similar rationale can be applied to explain differences in the risk of victimization between married and single women, and possibly between urban and suburban (or rural) residents.

In summary, based on the analysis of the literature, the following general hypotheses can be made. First, I hypothesize that race and ethnicity are relevant in explaining variations in risk levels for rape and sexual assault. Second, there are grounds to expect that such predictor

factors as poverty, place of residence, marital status, age, and other violent victimization are instrumental in explaining racial and ethnic differences in risk levels for sexual victimization. At the same time, the effects and degrees of relevance of individual predictors may vary across the three racial-ethnic groups due to their differential contextual positions within the American society.

Notwithstanding the fact that a great deal of literature has been amassed on the link between race and crime and race and victimization, and, less, to explain the link between race and ethnicity and victimization, many questions remain unanswered about the nature of race and ethnic differences specifically with respect to the risk of sexual victimization. No study to date has attempted multivariate analyses of the risk of rape and sexual assault victimization by race and ethnicity at the national level. The current study attempts to isolate the effects of race and ethnicity on the risk of rape and sexual assault for White, Black and Hispanic women controlling for known risk factors, including age, violent victimization, poverty, place of residence, and marital status. The study will also shed light on the underlying mechanisms of racial-ethnic differences in risk levels for sexual victimization associated with and mediated by the predictor measures included into the analyses.

RESEARCH QUESTIONS AND HYPOTHESES

The first two research questions in this study are methodological and attempt to provide estimates of indicators associated with the level of productivity of relevant questions on the NCVS screener in eliciting information on rape and sexual assault, and to check for potential differences in reporting by female respondents from the three racial-ethnic categories. The goal of these questions is to provide an understanding of how rape and sexual assault are

measured by the NCVS, as well as if concerns about potential differences in reporting by women from different subgroups can be confirmed or alleviated (to some extent).

RQ1: What is the general productivity of the NCVS screener questions relevant with respect to rape and sexual assault?

The goal of this question is to evaluate the relative productivity of the questions on the NCVS screener in eliciting reports of rape and sexual assault by female respondents. Based on the analysis of methodological issues provided in Chapter 1, the expectation is that questions closest to being behaviorally specific would yield a highest proportion of responses. Also based on these analyses as well as recent findings of the National Research Council (2014), questions that focus directly and solely on rape and sexual assault (as opposed to including sexual victimization as one of multiple other types of victimization) are likely to show highest levels of productivity.

RQ2: Do females from some racial-ethnic categories need more cues to volunteer information on rape/sexual assault experiences relative to women from other racial-ethnic categories? Are there differences in patterning, dynamics, and substance of reporting by race and ethnicity?

As previously noted, another vital question that has been raised but never addressed or answered in existing research studies is how much of the difference (or lack thereof) in the estimates for rape and sexual assault among various racial and ethnic categories of women can be accounted for by the differential willingness of respondents to report rape to the interviewers (e.g. Tjaden & Thoennes, 2006). This is an important question because if it continues to remain unanswered it can compromise any research findings with respect to the factors that drive racial-ethnic differences in self-reported estimates of sexual or other types

of victimization. The current research will begin to address this issue using the cuing mechanics of the NCVS.

Based on the analyses of methodological issues presented in Chapter 1 and recent findings by the National Research Council (2014), there is a high likelihood that the NCVS is undercounting rape and sexual assault. For the purposes of the current study, it is important that the magnitude of such undercounting be similar for the three racial-ethnic subcategories of women. There is no basis to either confirm or to disconfirm this expectation.

Research has suggested that some racial and ethnic groups may be less willing to disclose sexual victimization, especially by intimate partners, even in confidential settings, due to a higher prevalence of traditional values among these women (National Research Council, 1996; Tjaden & Thoennes, 2006). This fact brings up the issue of cultural sensitivity in reporting of violent victimization by women, especially in the reporting of sexual victimization. Though alluded to in the literature, the issue has not been yet addressed empirically.

An analysis of the literature on cultural attitudes and norms for various racial-ethnic groups also allows drawing inferences regarding potential differences in the likelihood and ease of reporting of sexual victimization by women from various backgrounds. Based on the fact that Hispanic culture emphasizes family honor, family closeness and purity of women, it is reasonable to predict that women from this group would be less comfortable with reporting sexual victimization out of the fear of bringing shame and dishonor to their families. This subpopulation also has highest proportions of recent immigrants. Hence, there may be a high number of people with immigrant non-citizen status that in and of itself reduces the

likelihood of reporting because of the fear of potential problems that may handicap obtaining American citizenship (Frias & Angel, 2005).

Available literature also provides grounds to suspect that Black women coming from disadvantaged and isolated areas could be distrustful of formal agencies and their representatives (NCVS interviewers could be viewed as such) for multiple reasons. They may not view NCVS interviewers as someone who would understand them and their experiences, and would not pass judgment, or someone who would keep their conversations and experiences private (Miller, 2008). Thus, it is justified to expect that Hispanic and Black women may be less willing and ready to report rape and sexual assault to NCVS interviewers, and will require more cuing than white women. The analysis of cueing is purely exploratory in nature and may not be ideal to answer the question of interest. However, this analysis represents an important first attempt to shed light on the issue, which to this date has remained purely hypothetical.

RQ 3: What are the percentages of rape and sexual assault by race and ethnicity?
RQ 3a: Are there differences in the way particular characteristics of rape/sexual assault incidents are distributed between the three racial-ethnic categories?

RQ3 represents an introductory step in the analysis, aimed at quantifying the breakdown of rape/ sexual assault victimization by race and ethnicity and analyzing whether such breakdown is comparable to the proportions within the population of the United States each of the three racial-ethnic groups represents.

RQ 3a asks if there are racial-ethnic differences in frequencies of such characteristics of rape and sexual assault incidents as ratios of completed and attempted rapes and sexual assaults, repeat and series sexual victimization, injury or serious injury, the presence of a

weapon, and victim-offender relationship. This question presupposes an exploratory analysis meant to yield some level of understanding of whether the profile of a "typical" or most frequent rape/sexual assault incident is different among the racial-ethnic categories.

Following the findings in the literature on violence against women and previously stated hypotheses guiding this research, it is expected that rape and sexual assault victimization is unevenly distributed between the three racial-ethnic groups, with Black, and less so Hispanic, women most likely to show highest shares of sexual victimization.

RQ 4: Is membership in a certain racial-ethnic group a significant predictor for the risk of the rape/sexual assault victimization? How do these relationships change when other sociodemographic variables are taken into account?

Based on available scholarly guidance, race and ethnicity are likely to be significant predictors for rape and sexual assault victimization. However the most important part of this research question is how such factors as place of residence, marital status, poverty, violent victimization, and age, affect this relationship. I hypothesize that these factors do exert important effects on the relationship between race and ethnicity and the risk of rape and sexual assault victimization. It is likely that introducing these factors into the analysis will make some of the group differences statistically insignificant or reduce the magnitude of significance. These factors are especially likely to have strongest effects on the differences between White and Black subgroups with respect to rape and sexual assault victimization because the levels of exposure to these factors are highly different between this two groups.

RQ5: Are there racial-ethnic differences in the effects and effect patterns of the named sociodemographic variables on the risk of rape/sexual assault victimization?

Much is still unknown about the mechanisms underlying differences in risk levels for sexual victimization for women of different races and ethnicities. In this respect, a study by Dugan and Apel (2003) is very important for the present research. This is the only study I was able to find that analyzed and uncovered meaningful differences in the effects of a number of risk and protective factors on the likelihood of violent non-lethal victimization for women from five race and ethnic categories, using NCVS data for 1992-2000. Among other results, their analyses indicate, for example, that being a high school dropout or only having a high school diploma poses a risk for only white females. They also found that the risk of violent victimization associated with living in urban areas was particularly high for Black and Native American females. Overall, their analyses demonstrate that certain risk factors are significantly related to some women, but not to others.

Based on the findings in Dugan and Apel's study, it is reasonable to expect that the effects of the predictor factors included in this study may also vary across the three racial-ethnic subgroups. Following Dugan and Apel's model, the predictors may be conceptualized as risk or protective factors based on their effects on the risk of rape and sexual assault victimization. For instance, being young (adolescent and young adult), poor, never married or divorced /separated, and residing in an urban area are risk factors, but their aggravating effects on the risk of rape and sexual assault victimization may vary for White, Black and Hispanic women. The effects of protective factors, such as being married or being a suburban resident, may also vary by race and ethnicity. These analyses will shed light on whether the membership in a certain race and ethnic subgroup may interact with or modify the effects of aforementioned predictors on the risk of rape sexual assault victimization. These exploratory analyses will show which factors have stronger protective or risk increasing effects for

particular racial-ethnic subcategories. The implications of these findings are important because they will help gain better understanding of contextual mechanisms that are more or less relevant depending on the membership in a certain race and ethnic group. As a result, they will help uncover the underlying mechanisms for the relationship between specific racial-ethnic categories and the risk of rape and sexual assault victimization.

Chapter 3: DATA AND METHODS

This chapter discusses data that have been used in this research as well as the methodological approaches used to answer each of the research questions in this dissertation.

DATA AND MEASURES

To answer the research questions, the project uses National Crime Victimization Survey (NCVS) data for 1994-2010. The NCVS has been gathering self-report data on personal and household victimization in the United States continuously since 1973. The data are gathered by the Census Bureau on behalf of the Bureau of Justice Statistics. The survey currently uses a nationally representative sample of persons ages 12 and older living in households to collect information on the frequency, characteristics and consequences of criminal victimization in the U.S. Although NCVS estimates of violence against women in general and rape and sexual assault in particular, are lower than estimates produced by other surveys (for instance, NVAWS), Rand and Rennison (2005) have shown that NCVS data are externally valid when compared to data obtained from the NVAWS. The size and representativeness of the NCVS sample is an important strength of these data when the goal is to estimate rates of violence among minority subgroups (Lauritsen & Rennison, 2006). At the same time, NCVS data contain important details on victims (race and ethnicity among others) and the incident of crime (presence or absence of injury; presence or adsence of a weapon; victim-offender relationship, etc.). This aspect makes these data particularly valuable for the purposes of the current enquiry. Pooling the data for multiple years insures sufficient numbers of interviews with minority-group members and further increases the statistical power of the data to permit reliable estimates.

The current research uses public-use data files, available through the National Archive of Criminal Justice Data at ICPSR (U.S. Department of Justice) – Study# 22927, National Crime Victimization Survey 1994 [Record-Type Files]; Study# 22926, National Crime Victimization Survey 1995 [Record-Type Files]; Study# 22925, National Crime Victimization Survey 1996 [Record-Type Files]; Study# 22924, National Crime Victimization Survey 1997 [Record-Type Files]; Study# 22923, National Crime Victimization Survey 1998 [Record-Type Files]; Study# 22922, National Crime Victimization Survey 1999 [Record-Type Files]; Study# 22921, National Crime Victimization Survey 2000 [Record-Type Files]; Study# 22920, National Crime Victimization Survey 2001 [Record-Type Files]; Study# 22902, National Crime Victimization Survey 2002 [Record-Type Files]; Study# 22901, National Crime Victimization Survey 2003 [Record-Type Files]; Study#4276, National Crime Victimization Survey 2004; Study#4451, National Crime Victimization Survey, 2005; Study#22560, National Crime Victimization Survey, 2006; Study#25141, National Crime Victimization Survey, 2007; Study#26382, National Crime Victimization Survey, 2008; Study#28543, National Crime Victimization Survey, 2009, and Study # 31202, National Crime Victimization Survey, 2010.

To answer the research questions, a master dataset has been created by pooling data for the period from 1994 to 2010 with a personal interview involving a female subject as a unit of analysis. As a first step, person- and incident-level files for each year were merged together. In order to allow merging incident and person-level files, the incident level files were restructured, and a maximum of five incidents per interview was linked to each person. Including five incidents per interview typically covers well over 95% of all incidents

reported. As a next step, necessary for the analyses variables from annual household-level files were added to annual person-incident files. Finally, all annual level files were merged together to create a single pooled dataset. Subsequently, all cases with male victims (i.e. respondents) have been excluded. The master dataset, including all interviews with females for the period from 1994 to 2010, contains 2,236,192 observations.

DEPENDENT VARIABLE

Rape and sexual assault: the NCVS records both completed and attempted rape in addition to other sexual assaults. Rape is defined as "forced sexual intercourse and includes both psychological coercion, as well as physical force. Forced sexual intercourse means vaginal, anal, or oral penetration by the offender(s). This category also includes incidents where the penetration is from a foreign object such as a bottle." The information on rape and sexual assaults is elicited using several cues. At first respondents are asked directly if they have experienced "*Any attack, rape, attempted rape, sexual attack, and forced or coerced unwanted sex*". Then NCVS interviewers also ask the following question: *Incidents involving forced or unwanted sexual acts are often difficult to talk about. Have you been forced or coerced to engage in unwanted sexual activity by: a. Someone you didn't know before? b. A casual acquaintance? c. Someone you know well?* If the respondents reply "Yes" to one of these questions, they are also asked, "*Do you mean forced or coerced sexual intercourse?*." The NCVS screener also utilizes other indirect cues in an attempt to elicit information on rape and sexual assault. These will be discussed in detail in connection with RQ 1&2.

For the purposes of this analysis, I will be using incidents coded both as rapes as well as other sexual assaults. These incidents include the following: completed rape, attempted rape,

sexual assault with serious assault, sexual assault with minor assault, sexual assault without injury, unwanted sexual contact without force, verbal threat of rape, and verbal threat of sexual assault. The variable rape/sexual assault will be coded as bivariate: 1 = yes, 0 = no. During the period from 1994 to 2010, there were a total number of 1884 (unweighted count) interviews with a female respondent where at least one rape or sexual assault was reported.

MEASURES OF INCIDENT CHARACTERISTICS

Completed rape/sexual assault: incidents have been categorized as completed rape/sexual assault if they included one of the following: completed rape, sexual assault with serious assault, sexual assault with minor assault, sexual assault without injury, and unwanted sexual contact without force. All other rape/sexual incidents were categorized as attempted rape.

Series victimization for rape and sexual assault: incidents of rape and sexual assaults were considered a series if they met the following three conditions: 1) the respondent reported six or more occurrences of the incident within the last six months; 2) positively answered to the question asking whether or not these incidents "were similar to each other in detail", and 3) answered negatively to the question asking whether or not she could "recall enough details of each incident to distinguish them from each other" (this question is used in the NCVS to identify series victimizations).

Repeat rape/sexual assault victimization: this measure is different from the series victimization incidents and includes cases when a respondent reported between a minimum of 2 and a maximum of 5 incidents of rape and sexual assaults. To generate this measure, separate variables were created for each of the five incidents that can be reported during a single interview with the value of 1 when the reported incident fell under rape or sexual assault. Subsequently, a variable was generated that added those cases up. Based on the

results, there were 104 interviews where two rape/sexual assault incidents were reported, 22 interviews with three reported incidents, and seven interviews with four reported incidents. These interviews were not counted under the series victimization, which is why I have included this additional measure. Women that have been victimized sexually more than once within a period of six months may be categorically different from women who experienced a single victimization and may also be different from those women included under the series victimization.

   Rape and sexual assault incidents with injury: incidents involving injuries include incidents where respondents confirmed presence of any injuries (other than the rape and sexual assault) in an answer to the corresponding direct question.

   Rape and sexual assault incidents resulting in serious injury: this variable identifies rape and sexual assault incidents with injury where the respondent also reported seeking medical care, including self-treatment.

   Rape and sexual assault incidents involving the use of a weapon by the offender: this variable includes rape and sexual assault incidents where the victim also gave a positive response to a question asking if "the offender had a weapon, such as a gun or a knife, or something to use as a weapon, such as a bottle or wrench".

   Victim-offender relationship: based on this criterion, single-offender incidents*[3] of rape and sexual assault were divided into three mutually exclusive categories: rapes/sexual assaults by strangers, rapes/sexual assaults by offender known to the victim, and rape/sexual assaults by intimate partners. Incidents were coded as stranger rapes/sexual assaults if the respondent said "stranger" responding to a question asking "if the offender was someone you

---

[3] Multiple-offender incidents have been excluded from this analysis to preserve mutual exclusiveness and clear boundaries between categories of offenders.

knew or a stranger you had never seen before". Incidents involving an offender known to the victim include rapes and sexual assaults by parent or step-parent, own child or step-child, brother/sister, other relative, friend or ex-friend, roommate or boarder, schoolmate, neighbor, customer-client, other nonrelative, patient, supervisor (current or former), employee (current or former), co-worker (current or former), teacher/school staff. Finally, the category of intimate partners includes spouse or ex-spouse at the time of the incident, boyfriend and girlfriend, or ex-boyfriend/ex-girlfriend.

INDEPENDENT VARIABLES

Race and Ethnicity Variable

The Census Bureau uses two separate questionnaire items to measure race and ethnicity. These two measures have been cross-classified to construct four mutually exclusive racial-ethnic categories: Non-Hispanic White, Non-Hispanic Black, Hispanic/Latina, and Other (to include Asian, American Indian, Alaska Native and respondents of two or more races). The fourth category of race and ethnicity has been created purely for technical reasons and does not represent a separate object of inquiry.

The measure of "race" changed over time in the following ways. Prior to 2003, respondents designated their race by selecting one of the following five categories: "white, black, American Indian/Aleut/Eskimo, Asian/Pacific Islander, or other." Beginning in 2003, respondents were permitted to select more than one race category, and the single race options included five categories now distinguishing Asians from Hawaiians and Pacific Islanders: "white, black, American Indian/Alaska Native, Asian, and Hawaiian/Pacific Islander." Because the proportion choosing more than one race category in the 2003-2005 NCVS is

small (approximately 1% of respondents) (Lauritsen & Heimer, 2009), racial-ethnic categories in 2003-2010 will be treated the same way as in the years prior (1994-2002).

Violent victimization: this measure is based on the "type of crime" variable (V4529) in the NCVS and incorporates all violent offenses, excluding rape and sexual assault: completed robbery with injury from serious assault, completed robbery with injury from minor assault, completed robbery without injury from minor assault, attempted robbery with injury from serious assault, attempted robbery with injury from minor assault, attempted robbery without injury, completed aggravated assault with injury, attempted aggravated assault with weapon, threatened assault with weapon, simple assault completed with injury, assault without weapon, without injury, verbal threat of rape, verbal threat of sexual assault, and verbal threat of assault. During the period from 1994 to 2010, there have been a total number of 20,341 (unweighted count) interviews with a female respondent where at least one violent victimization (excluding rape and sexual assault) has been reported.

Other Sociodemographic Variables

Age of female victims has been included as a continuous variable. It is based on the *age allocated* variable in the NCVS, corresponding to the age of the respondent at the last birthday, with the range of numerical values from 12 to 90.

Variables for the *marital status* have been created based on the respondents' situation at the time of the current survey period. This variable has been coded into three mutually exclusive categories: *married*, *widowed/divorced/separated* and *never- married* females. *The poverty status variable* has been created using income variable (V2026) from the NCVS, family size variables (V2071, V2072) and information on annual poverty thresholds for all years of data used in the analysis. Since the income variable in the NCVS (V2026) represents

the range of values, a decision has been made to use the upper value of each range as a base income. Variables V2071 and V2072 measure the number of people in the household 12 years of age and older and younger than 12 years of age, respectively. Values for these variables were added together to calculate the number of people in the household. Finally, poverty level (poor/not poor) has been determined by comparing the income value and the number of people in the household against a specific dollar amount of the poverty threshold for a household with this number of people for that year, based on the information from the Bureau of Census. Hence, whether or not the respondent belongs to the household above or below the poverty threshold has been determined with the highest degree of accuracy allowed by the data. The poverty variable is coded as a dummy (1 – below the poverty threshold; 0-not in poverty).

There is a concern about the amount of missing data on the poverty variable. For the full sample, the amount of missing data was 21.5%: 20.6% for White, 26.1% for Black and 21.2% for Hispanic. Adjusted Wald test showed that, for the full sample, the amount of missing data on poverty for Black women was statistically different from the amounts of missing data both for White and Hispanic women. However, subsequent Wald tests for the subsamples of the dependent variable revealed no statistically significant differences in the amounts of missing data for the three racial-ethnic groups. Hence, it was deemed appropriate to include poverty variables in multivariate analysis using a list-wise deletion method for handling missing data.

Place of residence variable contains the following three mutually exclusive categories: *urban, suburban* and *rural*. This variable is based on the MSA STATUS variable (V2129) in the NCVS. Urban status corresponds to the respondent residing in "Central City of (S)

MSA", suburban location of the residence means that the place is within (S) MSA, but not in the Central City, and, finally, urban, stands for the location outside S (MSA).

ANALYTIC STRATEGIES FOR ANSWERING REASERCH QUESTIONS

RQ1: What is the general productivity of NCVS screener questions relevant with respect to rape and sexual assault? RQ2: Do females from some racial-ethnic categories need more cues to volunteer information on rape/sexual assault experiences relative to women from other racial- ethnic categories? Are there differences in patterning, dynamics, and substance of reporting by race and ethnicity?

These two research questions will be addressed collectively here, as they require same data and methodology.

Strategy: One of the ways to begin approaching these questions is by looking at questions included in the NCVS screener that contain cues aimed at eliciting information about a certain incident. As I mentioned earlier, NCVS questionnaire consists of two major parts: screener questions and detailed incident report. The screener is used to identify whether or not a victimization incident may have occurred. It contains direct questions about a certain crime as well as a number of additional cues or prompts aimed to trigger the recall and encourage reporting by the victim. Using the valuable information, provided by V4011, which identifies the number of the question on the NCVS screener that prompted the report, it is possible to find out precisely which question on the screener has yielded a positive response and allowed generating a detailed incident report. In other words, it is possible to identify at which point during the screener portion of the interview a female respondent decided to report her victimization.

The following eight individual screener questions are considered in this analysis:

1)   Question 40 (asking about any incident involving attack or threat with a focus on place):
Q40: (Other than any accidents already mentioned,) since (date), were you attacked or threatened OR did you have something stolen from you:
   a) *At home including the porch or yard –*
   b) *At or near a friend's, relative's, or neighbor's home –*
   c) *At work or at school –*
   d) *In places such as a storage shed or laundry room, a shopping mall, restaurant, bank, or airport –*
   e) *While riding in any vehicle –*
   f) *On the street or in a parking lot –*
   g) *At such places as a party, theater, gym, picnic area, bowling lanes, or while fishing or hunting –*
      OR
   h) *Did anyone ATTEMPT to attack or ATTEMPT to steal anything belonging to you from any of these places?*

2)   Question 41 (asking about any incident involving attack or threat with a focus on the weapon used or type of attack):
Q41: (Other than any incidents already mentioned,) has anyone attacked or threatened you in any of these ways (Exclude telephone threats) –
   a) *With any weapon, for instance, a gun or knife –*
   b) *With anything like a baseball bat, frying pan, scissors, or stick –*
   c) *By something thrown, such as a rock or bottle –*
   d) *Include any grabbing, punching, or choking,*
   e) *Any **rape, attempted rape or other type of sexual attack** –*
   f) *Any face to face threats –*
      OR
   g) *Any attack or threat or use of force by anyone at all? Please mention it even if you are not certain it was a crime.*

3)   Question 42 (asking about any incident involving an attack or threat committed by someone known to the victim):
Q42: People often don't think of incidents committed by someone they know. (Other than any incidents already mentioned), did you have something stolen from you OR were you attacked or threatened by (Exclude telephone threats) –
   a) *Someone at work or school –*
   b) *A neighbor or a friend –*
   c) *A relative or family member –*
   d) *Any other person you've met or known?*

4)   Question 43 (asking directly about incidents involving **forced** or **unwanted sex**, explicitly naming these behaviors with emphasis on victim-offender relationship):
Q43: Incidents involving forced or unwanted sexual acts are often difficult to talk about. (Other than any incidents already mentioned), have you been forced or coerced to engage in unwanted sexual activity by –
   a) *Someone you didn't know before –*

b) *A casual acquaintance –*
   OR
c) *Someone you know well?*

5)   Question 44 (asking if the victim reported an incident she thought was a crime to the police within the last six months):
Q44: During the last 6 months, (other than any incidents already mentioned,) did you call the police to report something that happened to YOU which you thought was a crime?

6)   Question 45 (asking if the victim thought that an incident was a crime, but did not report it to the police):
Q45: During the last 6 months, (other than any incidents already mentioned,) did anything which you thought was a crime happen to YOU, but you did NOT report to the police?

7)   Two more questions have been prompted by the data as productive in eliciting

information on rape/sexual assault: Question 36 (asking about any property that may

have been stolen or attempted to be stolen):

Q36: I'm going to read some examples that will give you an idea of the kinds of crimes this study covers. As I go through them, tell me if any of these happened to you in the last 6 months, that is since (date).
Was something belonging to YOU stolen, such as –
a) *Things that you carry, like luggage, a wallet, purse, briefcase, book –*
b) *Clothing, jewelry, or cellphone –*
c) *Bicycle, or sports equipment –*
d) *Things in your home – like a TV, stereo, or tools*
e) *Things outside your home such as a garden hose or lawn furniture –*
f) *Things belonging to children in the household –*
g) *Things from a vehicle, such as a package, groceries, camera, or CDs –*
   OR
h) *Did anyone ATTEMPT to steal anything belonging to you?*

8)   Question 37 (asking if someone has broken in or attempted to break into a place of residence):
Q37: (Other than any incidents already mentioned,) has anyone –
a) *Broken in or ATTEMPTED to break into your home by forcing a door or window, pushing past someone, jimmying a lock, cutting a screen, or entering through an open door or window?*

b) *Has anyone illegally gotten in or tried to get into a garage, shed, or storage room?*
   OR
c) *Illegally gotten in or tried to get into a hotel or motel room or vacation home where you were staying?*

The eight questions above contain various cues to trigger the recall and encourage reporting of the incident by the victim, which is why it may be argued that the more cuing the victim needs to report an incident, the less willing/ready she is to volunteer this information. Thus, analysis of how females from different race and ethnic backgrounds react to these cues may become a source of inference about potential differences in their level of willingness/readiness to report victimization incidents to interviewers. First, the productivity (i.e. the number of incidents reported) for each of the above screener questions in eliciting information on rape/sexual assault incidents is estimated by survey-weighted frequencies and subsequently broken down by the three racial-ethnic categories. The sequencing of questions is also relevant for these analyses because it makes it possible to study the pattern and/or dynamics of rape/sexual assault reporting in general and specifically for women from certain racial-ethnic backgrounds. Survey-weighted descriptive analyses of methodological factors affecting reporting include the mode of the interview, whether or not someone was present during the interview, and if someone was present, who that person was, will be generated to control for potential differences between the three categories of women.

The major limitation of this approach, however, is that it is only possible to analyze cases where a female respondent has reported sexual victimization. There is no way to know or ascertain the proportion of cases where the respondent withheld the information, despite all the cues and effort by interviewers, and it is impossible to know how this number is distributed between the racial-ethnic subgroups of women. At this point, however, it is the

only way to approach the issue of possible differences in reporting, and it still can produce important findings with serious implications.

Analyses for research questions one and two will also include descriptive analyses of the distribution of sub-behaviors included in the measure of rape and sexual assault by race and ethnicity and methodological and other external factors that may affect reporting by race and ethnicity.

Data: The dataset for these analyses has been reconfigured to make **a reported incident of rape/sexual assault by a female** a unit of analysis. Separate variables have been created for each of five incidents that can be potentially reported during a single interview. Based on the data, 1327 incidents of rape/sexual assault have been reported as the first incident during an interview, 446 – as a second, 193 – as a third, 66 – as a fourth, and 21 – as a fifth incident. Also, as I have mentioned earlier, there were interviews where more than one incident of rape and/or sexual assault has been reported (104 interviews where two rape/sexual assault incidents were reported, 22 interviews with three reported incidents, and seven interviews with four reported incidents). For each incident of rape/sexual assault reported in the course of the interview, a separate incident report is generated (unless it is a series incident). The NCVS records the number of the question on the screener that prompted the incident report (V4011). This fact is crucial for the current analysis, and the key variable utilized to answer these research questions is V4011. In order to be able to identify the "productive" screener question for each separate incident of rape/sexual assault, the reconfigurations of the data were implemented. As a result of these modifications, the total number of cases used in these analyses is different from the n in previous analyses: **2053** (unweighted count) reported incidents of rape and sexual assault by a female versus **1884** (unweighted count) interviews

with female respondents where rape/sexual assault has been reported (the difference is due to the aforementioned interviews with multiple reported incidents of rape and sexual assault).

RQ 3: What are the percentages of rape and sexual assault by race and ethnicity? RQ 3a: Are there differences in the way particular characteristics of rape/sexual assault incidents are distributed between the three racial-ethnic categories?

Strategy: RQ3 is answered by the survey-weighted cross-tabulations *of rape/sexual assault* by *race and ethnicity*: frequencies and percentages are generated. RQ2 uses a similar analytic approach creating survey-weighted cross-tabulations for all relevant incident characteristics by racial-ethnic categories. Based on the specifics of each of the analyses, frequencies, ratios or percentages are generated in order to highlight the most relevant information. Subsequent tests of statistical significance are also conducted. T-test or Anova are not available for survey data, which is why statistical significance has been determined using Adjusted Wald test for each of the group pairs (e.g.: Hispanic versus Black, White versus Hispanic.)

Data: the survey-weighted master dataset is used, and observations are restricted to the interviews where a rape/sexual assault has been reported. The following variables are used in these analyses: race and ethnicity (White, Black, and Hispanic), and measures of incident characteristics, including completed and attempted rapes and sexual assaults, repeat victimization, series victimization, injury, serious injury, weapon and victim-offender relationship.

RQ 4: Is membership in a certain racial-ethnic group a significant predictor for the risk of the rape/sexual assault victimization? How do these relationships change when other sociodemographic variables are taken into account?

Strategy: As a preliminary step, a series of descriptive analyses is conducted for the whole sample and by racial-ethnic categories on all predictor variables, including tests of statistical significance (Wald test), for all cases and a subsample of rape/sexual assault cases, in order to single out between-group differences.

Subsequently, the research question is addressed, using a series of survey-weighted logistic regressions in STATA. Survey weights (V2117 – PSEUDOSTRATUM code, V2118 – SECUCODE = Half-Sample Code (standard error computation unit code), and V3080 = Person Weight (used to tabulate person or victim data)) have been applied to control for complex sampling techniques utilized in the NCVS. This method is based on Taylor series linearization, aimed at creating a nationally representative sample, controlling for variation in participation due to age, sex and race. Bivariate logistic regression of rape/sexual assault is conducted as a preliminary step with three racial-ethnic nominal categories as an independent variable (first, using White as a reference category, then, using Hispanic as a reference category). The next step consists in running a series of intermediate stepwise survey-weighted regression models for all possible combinations of independent variables. Finally, a full model survey-weighted logistic regression of rape/sexual assault is conducted, including all the independent variables. Additionally, a series of full-model regressions is utilized using incident characteristics as dependent variables (e.g. completed rape/sexual assault, rape/sexual assault with an injury, rape/sexual assault with a weapon) to check for possible differences in significant predictor factors.

Data: *Rape/sexual assault* is a dependent variable. Independent variables include *racial-ethnic* categories, *age*, *marital status* (with *married* as a reference category), *poverty status*, *place of residence* (with *rural* as a reference category), and *violent victimization*.

RQ5: Are there racial-ethnic differences in the effects and effect patterns of the named sociodemographic variables on the risk of rape/sexual assault victimization?

Strategy: Separate survey-weighted logistic regressions are conducted for subsets (by restricting observations) of Hispanic, Black and White women, simultaneously including all the predictor variables. Subsequently, z-scores are computed to estimate the differences between coefficients for the same predictor variables in different models. As a final step predicted probabilities for the risk of rape/sexual assault are generated using STATA, for each of the racial-ethnic groups, each of the predictor factors included in the analyses, and cumulative predicted probabilities for highest risk groups.

Data: the survey-weighted master dataset is used with observations restricted to the interviews with Hispanic, or White, or Black female respondents. The following variables are utilized in these analyses: rape/sexual assault (a dependent variable), *age*, *marital status (with married as a reference category)*, *poverty status*, *place of residence (with rural as a reference category)*, and *violent victimization*.

Chapter 4: RESULTS

In this chapter, I will discuss the findings obtained as a result of the analyses discussed in the previous chapter, their implications and substantive significance.

RQ1: What is the general productivity of NCVS screener questions with respect to rape and sexual assault?

The objective of this research question is to identify the pattern of reporting of rape and sexual assault for the full sample of females who reported this crime to the NCVS in 1994-2010. As I previously stated, the unit of analysis for RQ1 and RQ2 is a reported incident of rape and sexual assault of a female victim (as opposed to an interview with a female victim – the unit used in the rest of the analyses). I have also mentioned that, in some of the interviews, more than one incident of rape and sexual assault has been reported, which is why the total number of cases for these analyses is higher – 6,455,694 (or 2053 -unweighted count) reported incidents of rape and sexual assault (versus 5,751,517 (or 1884-unweighted count) interviews with female victims in the course of which at least one incident of rape and sexual assault has been reported).

General productivity results are shown in Table 4.1. As expected, Question 43 exhibits the highest level of productivity (35%) in eliciting information on rape and sexual assault. In the table, this question is listed as **Direct** and is highlighted in bold, together with **Question 41,** because these are the only two questions in the table (and in the NCVS screener in general) that explicitly mention "*forced/unwanted sexual act*" (Q 43) and *rape, attempted rape or other type of sexual attack* (Q41). Question 43 is the most direct question about rape and sexual assault (even though it does not use these specific terms). Sexual victimization, or, to be more exact, coerced sexual contact, constitutes the sole focus of the body of the question,

whereas multiple choices that follow have to do with who the perpetrator was in relation to the victim. Question 41 has the second highest level of productivity (30%) in collecting information about rape and sexual assault.

Table 4.1: General Productivity of the NCVS Screener Questions in Respect to Rape/Sexual Assault Reporting (n = 6,455,694).

NCVS Screener Question	Frequency	Percent of Total Incidents Reported *(Cumulative Percent)*
(Q 36) Stolen property	307,606	5%
(Q 37) Break-in	159,230	3% *(8 %)*
(Q 40) Attack/Place	1,289,732	20% *(28%)*
(Q 41) Attack/threat, weapon, type of attack)	1,928,535	30% *(58%)*
(Q42) Attack/threat by someone known to the victim	365,830	6% *(64%)*
(Q 43) Direct	2,240,864	35% *(99%)*
(Q44) Reported a crime to police within last 6 months	63,840	1% *(100%)*
(Q 45) Perceived as crime, but did not report to police	99,988	2% *(102%)*

Percentages do not add up to 100% due to rounding. N for cuing analyses is based on the number of incident reports of rape/sexual assault in the NCVS, 1994-2010.

This question uses the terms "rape", "attempted rape", and "sexual attack"; however, these cues are not introduced in the body of the question, but in the list of possible choices that follow, with rape and sexual assault mentioned in the final (seventh) cue. Based on these results, it becomes apparent that using direct cues and behaviorally specific questions and naming targeted sexual behaviors explicitly is an effective strategy in eliciting information on rape and sexual assault in comparison to other questions that do not offer cues directly associated with sexual victimization. Collectively, questions 41 and 43 are responsible for 65%, or close to two thirds, of all rape and sexual assault reporting. However it is worth considering that another 35% of reporting is picked up by other questions that are not directly tied to the sexual victimization. Notably, twenty percent of the remaining thirty five are picked up by Question 40, which is a transitional question between property and violent offenses. It is the first question on the screener that shifts the respondent's attention onto "attack" or "threat", i.e. violent behaviors (while still keeping the cue for property victimization as well).

It is also important to check which of the questions pick up what kind of behaviors included in the measure of rape and sexual assault. I was especially interested to see what questions pick up most of the reporting on the four most serious behaviors included in the measure: completed rape, attempted rape, sexual attack with serious assault, and sexual attack with minor assault. Both using the weighted and unweighted estimates, these four behaviors constitute about 70% of all reported behaviors, classified as rape and sexual assault in the NCVS for 1994-2010. 89% of these behaviors are picked up collectively by Questions 40, 41 and 43 (19%, 30% and 40% respectively). So, these questions are not only the most productive ones in general; they are also most productive in getting female respondents to

report most serious cases of rape and sexual assault. The hierarchies of productivity for these three questions are also the same for overall reporting and reporting of the most serious cases of rape and sexual assault. It may also be worth mentioning that questions 36 and 37 are also picking up some of the most serious cases: about 2.5% each. This is not what one would immediately expect since these questions do not have a direct relation to any violence, let alone, sexual violence; and yet, some females are willing to report their experiences and report serious sexual victimization on seemingly unrelated questions on the screener.

In order to understand, how the reporting of rape and sexual assault takes place using the NCVS instrument, it is not enough to simply point out the most and least productive questions in this respect. Questions on the NCVS screener represent a certain logical sequence, which is why it may be useful to analyze the dynamics or pattern of reporting, based on the sequencing of questions. The questions are listed in Table 4.1 based on their sequence in the NCVS screener. In terms of the pattern of reporting, the productivity of each subsequent question is continually increasing up until Question 43, and then drops. After Question 43, 98% of all cases have already been reported, and just a small fraction remains. There is a break in this general pattern on Question 42, which focuses specifically on attacks or threats (or theft) by someone known to the victim. Based on other analyses (that follow) and recent research findings (e.g. by the NRC, 2014), rape and sexual assault by someone known to the victim has become the most frequent category of rape in recent decades. With this consideration in mind, it would make sense to expect a somewhat higher level of reporting on Question 42 (which constitutes only 6%); especially taking into account that, at this point during the interview, about 35% of rape and sexual incidents have not yet been reported. At the same time, Question 42 immediately follows the question that explicitly

names sexual victimization behaviors among the cues, and it is hard or impossible to compete with that, from the point of view of the productivity. In its nature, Question 42 is comparable to Question 40, which also focuses on attack or threat (or theft) with an emphasis on the possible location of the incident, and Question 40 yields 20% of positive responses. All factors considered, it may be the case that low reporting on Question 42 is associated with potentially increased level of unwillingness and/or discomfort to report victimization by someone known to the victim.

Analyzing the linear pattern of reporting, it also becomes clear that individual women are different in their willingness and readiness to report sexual victimization to interviewers. There are outliers on both sides of the spectrum: about 8% of the women who are more willing to report their victimization and do not require direct or behaviorally specific cuing. On the other hand, there are roughly 3% of women who still do not report being victimized until the very end (Questions 44 and 45), having been bombarded by all the different direct and indirect cues of the previous questions. The fact that individual women are different in their level of willingness and readiness to report such private experiences seems obvious. However it is also very important with respect to the issues associated with a methodology that may or may not be effective in getting females to report rape and sexual assault victimization. The findings demonstrate that both questions, using most direct and explicit cues related to sexual victimization, yield highest proportions of positive responses. From a methodological standpoint, it means that repetitive cuing is effective, especially when such complex behaviors are concerned.

RQ2: Do females from some racial-ethnic categories need more cues to volunteer information on rape/sexual assault experiences relative to women from other racial-ethnic categories? Are there differences in patterning, dynamics, and substance of reporting by race and ethnicity?

This question is important because, if there are significant differences in the reporting of rape and sexual assault by women from different racial-ethnic backgrounds, it is uncertain, whether the differences (or lack thereof) in the levels of sexual victimization revealed by research findings reflect actual differences (or lack thereof) in the distribution of these phenomena or are obscured by differential reporting. My analyses do not answer this question conclusively. However, they can still provide some important evidence in this respect and possibly somewhat alleviate the aforementioned concerns.

Table 4.2 presents the results from Table 4.1 broken down by race and ethnicity. The findings demonstrate that, from the point of view of the general productivity of the questions, there are no obvious differences between the three racial-ethnic groups. For White, Black and Hispanic women, Questions 43 and Questions 41 are most productive in eliciting reports of rape and sexual assault. No obvious differences can be singled out in the linear patterns of reporting by race and ethnicity. The pattern is nearly identical to the one that has been previously discussed with respect to the full sample: proportionally, reporting of rape and sexual assault increases with each subsequent question up to and including Question 43 (with similarly low reporting on Question 42). By that point, on average, 97.5% of all known incidents have already been reported, so the reporting drops dramatically after Question 43.

Table 4.2: Productivity of the NCVS Screener Questions in Respect to Rape/Sexual Assault by Race and Ethnicity Reporting (n = 6,455,694).

Question	Non-Hispanic White n=4,384,288 % (cumulative %)	Hispanic/Latina n=512,423 % (cumulative %)	Non-Hispanic Black n=1,046,546 % (cumulative %)
(Q 36) Stolen property	1%	2%	3%
(Q 37) Break-in	3% *(4%)*	3% *(5%)*	2% *(5%)*
(Q 40) Attack/Place	22% *(26%)*	23% *(28%)*	14% *(19%)*
(Q 41) Attack/threat, weapon, type of attack)	31% *(57%)*	25% *(53%)*	31% *(50%)*
(Q42) Attack/threat by someone known to the victim	6% *(63%)*	8% *(61%)*	8% *(58%)*
(Q 43) Direct	35% *(98%)*	36% *(97%)*	39% *(97%)*
(Q44) Reported a crime to police within last 6 months	1% *(99%)*	3% *(100%)*	1% *(98%)*
(Q 45) Perceived as a crime, but did not report to police	2% *(101%)*	0 *(100%)*	1% *(99%)*

Percentages may not add up to 100% due to rounding. N for cuing analyses is based on the number of incident reports of rape/sexual assault in the NCVS, 1994-2010. "Other" category is omitted from these analyses.

Even though no meaningful differences in the patterning of the reporting by race and ethnicity have been revealed by the results, there are some slight quantitative variations that worth considering. There are some slight quantitative variations on the leading questions: on Question 40, for instance, the reporting for Black females is slightly lower (14%) relative to White (22%) and Hispanic (23%) women. At the same time, on Question 41, containing direct clues, Hispanic females report a slightly lower proportion of incidents (25%) compared to both White and Black females (at 31%). Finally, on the "direct" question, White (35%) and Hispanic (36%) report a slightly lower proportion of incidents relative to Black females (at 39%). However, these quantitative differences are not statistically significant, and do not seem to be meaningful substantively. Thus, the patterns and dynamics of the reporting between the three subgroups of women appear close to being perfectly uniform, and provide some evidence to alleviate concerns about potential bias in reporting, based on race and ethnicity.

Since the measure of rape and sexual assault includes several behaviors, it is also important to analyze whether there are subgroup differences in the types of behaviors females from the three racial-ethnic groups choose to report. Table 4.3 shows the proportional distribution of all behaviors that are included into the measure of rape and sexual assault, for each of the three racial-ethnic groups. Three behaviors with the highest proportion of being reported are the same for the three groups: completed rape, attempted rape, and sexual assault without injury. Also comparable are proportions of the four most serious behaviors reported by White, Black and Hispanic women (70%, 64% and 60% respectively). There do not seem to be noticeable differences in the hierarchies of behaviors, from the point of view of their reported proportions, either. However, if we are to consider

the last three behaviors listed in the table as the least serious ones, relative to other behaviors in the table, adding up their proportions for each group might reveal notable differences. For Hispanic females, these behaviors constitute 27%, for White women – 20%, while for Black females – only 13%. Taking into account that Hispanic females also report the lowest (among the three groups) proportion of the most serious behaviors (60%), at the same time reporting the highest (among the three groups) proportion of the least serious behaviors, this may constitute a distinctive characteristic of this group of women, relative to other two subgroups. For White and Black women it is not as clear. White females report the second highest proportion of the least serious behaviors and the highest (among the three groups) proportion of the most serious behaviors. On the other hand, Black females report the smallest proportion of the least serious behaviors and the second highest proportion of the most serious behaviors among the three groups. So, based on this analysis, differences between White and Black females are not immediately clear. However, Hispanic women seem to grant more importance to less serious sexual acts compared to White and Black women.

Before any conclusions can be drawn about the subgroup differences in reporting, it is necessary to consider subgroup indicators on some of the methodological and other external factors that may potentially affect reporting of victimization to the NCVS interviewers. These indicators include whether the interview was bounded or unbounded, a mode of the interview (phone or in-person), and for in-person interviews: whether or not someone else was present during the interview, and the relation of a third party to the subject.

Descriptive statistics for these indicators are shown in Table 4.4. Looking at the results, it becomes immediately apparent that the proportions of in-person interviews are lower for White (36%) and Hispanic (34%) females relative to Black females (49%), and these

Table 4.3: Reporting of Behaviors Constituting Rape and Sexual Assault by Race and Ethnicity: Females Only, NCVS 1994-2010.

Subtypes	Percent		
	Non-Hispanic White n=4,384,288	Hispanic/Latina n=512,423	Non-Hispanic Black n=1,046,546
Completed Rape	37%	38%	28%
Attempted Rape	18%	21%	25%
Sexual Assault with Serious Assault	5%	6%	3%
Sexual Assault with Minor Assault	4%	5%	4%
Sexual Assault without Injury	16%	17%	14%
Unwanted Sexual Contact Without Force	8%	6%	12%
Verbal Threat of Rape	6%	2%	8%
Verbal Threat of Sexual Assault	6%	5%	7%
Total	100%	100%	101%

Percentages may not add up to 100% due to rounding.

differences are statistically significant. The proportions of in-person interviews are statistically different between Black and Hispanic women at p<. 05 and such difference is even more highly significant between White and Black females – at p<. 01. Recent research findings show that females are more likely to report victimization during an in-person interview (Lauritsen, 2012, NRC, 2014). Hence, the finding that Black women have a larger

proportion of in-person interviews compared to other subgroups means that, by virtue of this circumstance, they are put in a position to report more incidents than the other two groups of women. In other words, White and Hispanic females can potentially under-report their victimization compared to Black females, as a result of being interviewed in person in only about one third of cases. The differences between the three racial-ethnic categories are not significant on the indicator for unbounded interviews. Black and Hispanic women show slightly higher percentages of unbounded interviews (13.6% and 14.2%, respectively) compared to White women, which most likely has to do with the fact that Black and Hispanic households have higher rates of residential mobility and thus are new to the sample more often than White households. Both in-person and unbounded modes of interview constitute factors that may increase reporting.

Another important factor to consider is whether or not someone else is present during the interviews. This indicator is measured only for in-person interviews. The results in Table 4.4 indicate that for in-person interviews, the proportion of interviews with a third person (or persons) being present is highest for Black females (56%) and lowest for Hispanic/Latina women (34%), and the difference on this factor is statistically significant for these groups at p<. 05. The higher frequency of the third-party presence during interviews for Black females is likely to negatively affect their rate of reporting, so the effect of this factor somewhat reduces positive effects of the aforementioned modes of interview for this subgroup of women. For Hispanic women, this factor also has some compensatory effect, reducing the negative effects of low proportions of in-person.

To sum up, the analysis of the factors relevant for the reporting provides evidence of bias in favor of increased reporting by Black females and reduced reporting by White and

Hispanic females. This finding is noteworthy since it reveals the presence of a certain bias, putting females from different racial-ethnic groups in differential positions, from the point of view of the likelihood of reporting. At this point, however, it is hard to ascertain how this bias can affect the estimates by race and ethnicity.

Table 4.4: Descriptive Statistics on External/Methodological Factors that May Affect Reporting by Race and ethnicity.

Factor	Non-Hispanic White n=4,019,631	Hispanic/Latina n=496,612	Non-Hispanic Black n=907,407
Unbounded Interviews	9.3%	14.2%	13.6%
Phone Interview	64 %**[a]	66%*[c]	51%*[c]
In-Person Interview:	36%**[a]	34%**[a]	49%*[c]
Someone else present^	45%	34%*	56%*
Spouse present^^	32%	24%	27%
12+, not spouse^	30%	33%	28%
Under 12 present^	15%	31%	16%
Non-HH members^	14%	10%	9%

*p<.05; **p<.01. ^In-person interviews only. ^^Married females only (n for married women - victims of rape/sexual assault who underwent in-person interview: White = 171,743; Black = 27,429; Hispanic = 43,443). [a] = White vs. Black; [b]= White vs. Hispanic; [c] = Hispanic vs. Black.

Overall, Research Question 2 asked if females from different racial-ethnic groups required more cuing relative to each other to volunteer information about their rape/sexual assault

victimization experiences, and whether there are differences in a qualitative patterning or dynamics of reporting between the three subgroups of women. The analyses of cuing did not reveal any variation in the required number of cues by race and ethnicity, nor did they identify meaningful differences in the dynamics of reporting. In fact, the analyses have revealed a surprisingly uniform pattern of reporting by race and ethnicity. So these analyses have produced evidence to alleviate some concerns about differential reporting by females from separate racial-ethnic groups.

On the other hand, analyses of methodological and other external factors that may affect reporting have revealed potentially alarming differences. The findings give reasons to believe that Black females are put in a more favorable situation with respect to the likelihood of reporting, while White and Hispanic females may find themselves in the circumstances potentially reducing the likelihood of their reporting of the victimization experiences to the NCVS. The impact of this bias is hard to estimate, and, at this point, it is unclear what kind of effect (if any) it may have on the estimates of rape and sexual assault by race and ethnicity, based on the NCVS data. However, this finding should be taken into consideration while interpreting the results of analyses for the remaining research questions.

Also, I should note again that the above analyses cannot answer the question whether greater proportions of women from one racial-ethnic subgroup are more likely to be under-reporting their rape/sexual assault experiences because this information cannot ultimately be knowable from the survey data. Nonetheless, the evidence put forth by these analyses should be considered alongside other evidence about how methodology affects self-reports of rape and sexual assault.

RQ 3: What are the percentages of rape and sexual assault by race and ethnicity?

RQ 3a: Are there differences in the way particular characteristics of rape/sexual assault incidents are distributed between the three racial-ethnic categories?

RQ3 is a preliminary step in this stage of the investigation, aimed at producing general estimates for the levels of rape and sexual assault victimization reported by women from the three racial-ethnic groups to the NCVS in 1994-2010. As it has been mentioned earlier, during the period from 1994 to 2010, a total of 5,751,517 rape/sexual assault incidents against females were reported to the NCVS (1884 – raw count) out of the total number of 5,902,973,531 of all crime victimization incidents (2,236,192- raw count) and 66,773,183[4] incidents of violent crime (22,225 – raw count) . Based on these estimates, rape/sexual assault incidents with female victims constitute less than 1% of all reported crime victimization incidents with female victims for this period, and less than 9% of all reported incidents of violent crimes against females. Frequencies and percentages for the levels of rape and sexual assault victimization for each of the three racial-ethnic groups are shown in Table 4.5. As a point of reference, population estimates for each racial-ethnic group (14 years of age and older) are given as a percentage of the entire US population (14 years of age and older), averaged between 2000 and 2010 Census indicators. Table 4.5 demonstrates the way the total number of reported rapes and sexual assaults against females is distributed by race and ethnicity. Compared to their proportions in the population (12.0%), Black women report a higher proportion of all rape and sexual assault incidents (16%), while Hispanic and White females report lower percentages (9% and 70 %, respectively) compared to their shares

---

[4] Here the measure of violent crime also includes rape and sexual assault incidents for the purposes of showing the proportions, and it is different from the violent victimization measure that will be used in multivariate analyses.

within the U.S. population (12.5% and 81.1%, respectively). This may serve as a preliminary

indication that sexual victimization may not be evenly distributed among the three racial-

ethnic groups, and, in this respect, the difference between minority subgroups is especially

notable. It is also worth mentioning that White and Hispanic women proportionally show

lower levels of rape and sexual assault. Based on these preliminary indicators, Black females

appear to be exhibiting highest levels of rape and sexual assault victimization among the

three subgroups.

Table 4.5: Survey-Weighted Percentages of Rape/Sexual Assault against Females by Race and Ethnicity, 1994-2010, n=5,751,517.

Racial Ethnic Group	Percent of all rape/sexual assaults (number of incidents)	Percent of Racial-Ethnic Group (age 14+) of the Whole US Population (age 14+) (Average Census 2000, 2010)
White (Non-Hispanic	70% (4,019,631)	81.1%
Black (Non-Hispanic)	16% (907,407)	12.0%
Hispanic	9% (496,612)	12.5%

*Percentages do not add up to 100% because "Other" category is omitted from this analysis and all other analyses for this research question.

With the help of the analyses associated with RQ3a, it is possible to create a qualitative

profile of a typical incident of rape and sexual assault victimization, based on a number of

incident characteristics, and analyze whether these scenarios differ among the three racial-

ethnic groups of females. The results for RQ3a are shown in Tables 4.6-4.10.

From the point of view of the ratios of completed to attempted rapes and sexual assaults

(Table 4.6), Hispanic women are different from the other two subgroups. For Hispanic

women, completed rapes and sexual assaults are only 1.4 times more frequent than attempted

incidents of the kind. In other words, for every two attempted rapes/sexual assaults for this

category of women, there will be about three completed rapes and sexual assaults. For Non-Hispanic Black females, completed rapes and sexual assaults are almost three times as frequent as attempted behaviors of the kind. Women in this subcategory report the highest proportion of completed rapes/sexual assaults. For White females, completed rapes and sexual assaults are almost 2.5 times as frequent as attempted rapes and sexual assaults.

Table 4.6: Incident Characteristics: Ratios of Completed to Attempted Rapes/Sexual Assaults against Females by Race and Ethnicity, 1994-2010, n=5,751,517.

Racial Ethnic Group	# Completed Rapes/Sexual Assaults	# Attempted Rapes/Sexual Assaults	Ratios of Completed to Attempted Rapes/Sexual Assaults
Non-Hispanic White	2,846,930	1,172,701	2.4:1
Non-Hispanic Black	670,978	236,429	2.8:1
Hispanic/Latina	303,221	193,391	1.4:1

However, these differences may be partially explained by differences in proportions of sexual behaviors reported by women from each of the subgroups, which have been revealed by previous analyses. Hispanic females report the highest proportion of the least serious behaviors between the three groups, which can explain the lowest ratio between attempted and completed rape and sexual assault for this group. White and Black females are comparable with respect to the substantive distributions within their reporting, and the ratios of completed to attempted rape and sexual assault are also comparable in these groups.

Table 4.7 shows percentages for incidents of repeat and series victimization for the three subcategories of women. As a reminder, *repeat victimization* includes cases when the female

respondent reported between 2 and 5 incidents of rape that had occurred during the reference period (with the actual maximum of 4 incidents in the data) and this measure is substantively different from the measure of the *series victimization*. The latter measure only counts cases where six and more similar in nature incidents have been reported by a female respondent.

Table 4.7: Incident Characteristics: Percentages for Incidents of Repeat Victimization and Series Victimization for Rape and Sexual Assault against Females by Race and Ethnicity, 1994-2010, n=5,751,517.

Racial-Ethnic Group	# Incidents of Repeat Victimization (% of all reported rape/sexual assault incidents for this racial- ethnic group)	# Incidents of Series Victimization (% of all reported rape/sexual assault incidents for this racial- ethnic group)
Non-Hispanic White	275,805 (6.8%)	392,902 (9.8%)
Non-Hispanic Black	101,428 (11.1%)*[c]	64,572 (7.1%)
Hispanic/Latina	20,676 (4.2%)*[c]	31,922 (6.4%)

[c] = Hispanic vs. Black. *p<.05.

For incidents of repeat victimization, the differences between White and Black (6.8% and 11.1%, respectively), and White and Hispanic women (6.8% and 4.2%) are not statistically significant, while the differences between Black and Hispanic women (11.1% and 4.2% respectively) are significant at $p<.05$. This is another finding that indicates that there may be statistically significant differences in the distribution and characteristics of rape and sexual assault between the minority subcategories of women. For incidents of the series victimization, the inter-group differences are not significant for any of the group pairs. However, White females report the highest proportion of the series victimization incidents (close to 10% of all rape and sexual assault incidents for this subgroup of women). Hispanic females report the lowest proportion of the series victimization as well as repeat victimization incidents.

There is a certain level of variation among the three racial-ethnic subgroups of women, based on such incident characteristics as an infliction of injury or serious injury. The results of this analysis are presented in Table 4.8. It should be noted that the numbers and percentages of incidents resulting in injury incorporate incidents resulting in serious injury. From the point of view of both of these indicators, Black females most frequently report injuries as a result of attempted or completed rapes and sexual assaults: for this subgroup, 61% of all incidents result in injury, and about 26% in serious injury. This may also be partially explained by the fact that this group reports the lowest proportion of the least serious cases of rape and sexual assault. It should be noted, however, that they report the highest proportion (among the three groups) of sexual assaults without injury. Thus, the estimates for the proportion of incidents resulting in injury and serious injury for this group of women may have some validity.

Table 4.8: Incident Characteristics: Incidents of Rape and Sexual Assault against Females Resulting in Injury by Race and Ethnicity, 1994-2010, n=5,751,517.

Racial-ethnic Group	# incidents resulting in injury (Percent of all rape/sexual assaults for this racial-ethnic group)	# incidents resulting in serious injury (Percent of all rape/sexual assaults for this racial-ethnic group)
Non-Hispanic White	2,286,248 (57%)	842,093 (20.9%)
Non-Hispanic Black	557,434 (61%)*[c]	233,737 (25.8%)*[c]
Hispanic/Latina	228,682 (46%)*[c]	92,974 (18.7%)*[c]

[c] = Hispanic vs. Black. *p<.05.

Estimates for these two indicators are considerably lower for Hispanic women, showing the presence of injury in 46% of all cases, and the presence of serious injury in about 19%. For the injury and serious injury estimates, the differences are statistically significant only

between Black and Hispanic females: at p<. 05. This may be yet another indication that the two minority groups of women show divergent characteristics associated with rape and sexual assault victimization. White females represent a midway category, based on the presence of an injury and/or a serious injury in rape/sexual assault incidents. Women in this category report that 57% of all rape/sexual assault incidents result in injury, and slightly approximately 21% - in serious injury.

Table 4.9: Incident Characteristics: Incidents of Rape and Sexual Assault against Females Involving a Weapon by Race and Ethnicity, 1994-2010, n=5,751,517.

Racial-ethnic Group	Number of incidents where Offender Used a Weapon	Percent of all rape/sexual assaults for this racial-ethnic group
Non-Hispanic White	487,629	12%
Non-Hispanic Black	161,269	18%
Hispanic/Latina	78,592	16%

Another important incident characteristic is whether or not the offender used a weapon during rape or sexual assault incident. Results, based on this indicator are shown in Table 4.9. Once again, based on the data, Black females most frequently report being sexually victimized when a weapon is present, relative to the other two categories of women: a weapon was present in about 20% of all rape and sexual assault incidents against Black women. Noticeably, Hispanic women represent the category with the second highest proportion of incidents of sexual victimization involving the use of a weapon by the offender: these cases make up 16% of all incidents for this subgroup. The proportion of the incidents where the offender had a weapon is lowest for White women (12% of all incidents for this

subgroup). However, differences between subgroup estimates on this indicator are not statistically significant for any of the group pairs.

Such incident characteristics, as the use of a weapon and infliction of injury and/or serious injury, estimate the overall level of violence of rape and sexual assault in this case. Based on the results, the rape/sexual victimizations that Black females report are most likely to be more violent in nature relative to the other two racial-ethnic categories (Black females report highest numbers for both of these indicators). The results are less clear for White and Hispanic women. Based on the use of a weapon in rapes and sexual assaults, Hispanic women are more likely to report more violent rape and sexual assault victimizations compared to White females. However, the conclusion is reversed, if it is based on the presence of injury and/or serious injury.

The final incident characteristic that can be estimated and analyzed, using the NCVS data is victim-offender relationship. Table 4.10 presents the distribution of **single-offender** rape/sexual assault incidents by victim-offender relationship for all three racial-ethnic categories of women. Based on the findings, the most frequent category of rape and sexual assault across all three subgroups of women involves rapes and sexual assaults by someone known to the victim. This category includes the highest number of potential perpetrators, such as co-workers, business contacts, friends, acquaintances, i.e. all nonrelatives, excluding past and current spouses and romantic partners. The results indicate that stranger rapes no longer constitute the most frequent category of rape. It should be noted that although the proportions of rapes by someone known to the victim are the highest for all three racial-ethnic groups, the value is noticeably lower for Hispanic/Latina females. For this group, this number is slightly higher than 36% of all rapes and sexual assaults, compared to

approximately 46% for White and Black females. However, the differences in known

offender estimates are not statistically significant for any of the group pairs.

Table 4.10: Incident Characteristics: Incidents of Rape and Sexual Assault against Females by Victim-Offender Relationship by Race and Ethnicity (for Single-Offender Incidents), 1994-2010, n=5,434,863*.

Racial-ethnic Group	# Stranger Rapes/ Sexual Assaults (% of all rape/sexual assaults for this group)	# Rapes/Sexual Assaults by Intimate Partners (% of all rape/sexual assaults for this group)	# Rapes/Sexual Assaults by Offenders Known to the Victim (% of all rape/sexual assaults for this group)
Non-Hispanic White	745,403 (20.4%)	985,937 (27.0%)***[b]	1,840,672 (50.3)
Non-Hispanic Black	130,644 (15.8%)*[c]	185,133 (22.4%)	401,700 (48.7%)
Hispanic/Latina	130,296 (28.8%)*[c]	65,479 (14.5%)***[b]	184,151 (40.7%)

*The n in this table is reduced because multiple-offender incidents (constituting about 5% of all rape and sexual assault incidents against females in 1994-2010) are omitted from the analyses. Missing data on the victim - offender relationship make up about 4.5%. [b]= White vs. Hispanic; [c] = Hispanic vs. Black. *p<.05;***p<.001.

Another important finding is that the second highest category of rape and sexual assault

both for White and Black females comprises incidents involving intimate partners as

perpetrators. Sexual victimization by intimate partners constitutes almost 27% of all cases for

White women, and slightly more than 22% for Black women. This also means that for these

categories of women, rapes and sexual assaults are least frequently perpetrated by strangers.

The distribution is different for Hispanic women. Based on the self-reports by Hispanic

women, rapes and sexual assaults by intimate partners represent the least frequent type of

sexual victimization for this racial-ethnic group (around 15% of all cases), while stranger

rapes comprise the second most frequent category of rape (close to 29% of all cases for this subgroup) after rapes and sexual assaults by offenders known to the victim (close to 41%). The differences between stranger rape estimates for Black and Hispanic females are statistically significant at p<.05, and the differences in intimate-partner rapes and sexual assault estimates are statistically significant between White and Hispanic females at p<.001. Hence, findings, based on this criterion, indicate that there are certain differences in a scenario of a typical rape/sexual assault for women from different racial-ethnic backgrounds, from the point of view of who represents the most likely perpetrator.

Findings for RQ1 and RQ1a also indicate that there are some quantitative differences in the frequencies for certain characteristics of rape and sexual assault incidents among the three racial-ethnic categories of women. Compared to the other two subcategories of women, Black females report the highest number of victimizations in the form of completed rape/sexual assault, when they suffer an injury or serious injury in the course of rape or sexual assault, and become subject to a sexual attack involving a weapon. Relative to the other two subcategories of women, White females are most likely to report repeat sexual victimization. Compared to Black and White women, Hispanic females report the least frequent victimization by completed, rather than attempted, rape or sexual assault, repeat sexual victimization, and least often report an injury and/or serious injury received in the course of or as a result of rape or sexual assault. Based on the self-reports, rapes and sexual assaults by offenders known to the victim represent the most typical category of sexual victimization incidents for all three subcategories of women. However, indicators for the second highest frequency category of rape/sexual assault by victim-offender relationship differ between the subgroups: for Hispanic women this category includes sexual

victimization by strangers, whereas, for Black and White females, sexual victimization by intimate partners is the second highest subcategory. According to the same set of estimates, Hispanic women report proportionally the lowest number of rapes/sexual assaults by intimate partners, compared to the other two categories of women.

RQ 4: Is membership in a certain racial-ethnic group a significant predictor for the risk of the rape/sexual assault victimization? How do these relationships change when other sociodemographic variables are taken into account?

This research question attempts to gain better understanding of the relationship between racial-ethnic membership and risk of sexual victimization as well as to analyze how this relationship is affected when other relevant variables are introduced into the analysis. As I have previously mentioned, preliminary analytical procedures for this research question involve two sets of descriptive analyses that help highlight between-group differences. Table 4.11 presents descriptive statistics for all the variables included in the analyses for the full sample and by race and ethnicity. Table 4.12, that follows, presents descriptive statistics for the full sample of female victims of rape and sexual assault and subsets of female victims of rape and sexual assault by race and ethnicity. These analyses are useful because they produce preliminary evidence of statistical differences between the three racial-ethnic subgroups of women with respect to their distributions by the relevant sociodemographic variables included in the current study. Also, these analyses show whether these differences are the same for the full sample of female victims (90% victims of property crime) and a sample of

Table 4.11: Descriptive Statistics for Full Sample of Female Victims and Subsets of Female Victims by Race and Ethnicity, NCVS 1994-2010.

Variable	Percent or Mean			
	Full Sample *(n = 5,902,973,531)*	White Non-Hispanic (4,198,479,127)	Black Non-Hispanic (731,631,050)	Hispanic/Latina (n= 665,400,055)
Race and Ethnicity:				
White	71.1%			
Black	12.4%			
Hispanic	11.3%			
Other	5.2%			
Missing	0%			
Age	43.0	45.1***[ab]	39.5***[ac]	35.7***[bc]
Missing	0%			
Place of Residence:				
Urban	30.3%	23.0%***[ab]	52.7%*[c]	47.1%*[c]
Suburban	50.9%	54.6%***[ab]	34.3%***[ac]	45.6%***[bc]
Rural	18.8%	22.4%***[ab]	13.1%*[c]	7.26%*[c]
Missing	0%			
Marital Status:				
Married	49.0%	52.9%***[ab]	26.9%***[ac]	46.3%***[bc]
Divorced/Separated/Widowed	21.6%	22.1%***[ab]	25.9%***[ac]	16.4%***[bc]
Never married	28.8%	24.3%***[ab]	45.8%***[ac]	36.8%***[bc]
Missing	.6%	.7%	.5%	.5%
Poverty Status:				
Poor	34.3%	30.0%***[ab]	26.1%***[ac]	30.7%***[bc]
Non-poor	44.2%	49.3%	47.8%	48.1%
Missing	21.5%	20.6%	26.1%	21.2%
Violent Victimization	1.0%	.98%***[a]	1.4%***[ac]	1.0%***[c]
Missing	0%			

[a] = White vs. Black; [b]= White vs. Hispanic; [c] = Hispanic vs. Black. *p<.05; **p<.01; ***p<.001.

Table 4.12: Descriptive Statistics for Full Sample of Female Victims of Rape and Sexual Assault and Subsets of Female Victims of Rape and Sexual Assault by Race and Ethnicity, NCVS 1994-2010.

Variable	Percent or Mean			
	Full Sample (*n = 5,751,517*)	White Non-Hispanic (n=4,019,630)	Black Non-Hispanic (n=907,406)	Hispanic (n= 496,612)
Race and Ethnicity:				
White	69.9%			
Black	15.8%			
Hispanic	8.6%			
Other	5.7%			
Missing	0%			
Age	27.0	27.3	26.0	25.5
Missing	0%			
Place of Residence:				
Urban	41.1%	32.6%***[ab]	72.5%***[a]	54.7%*[c]
Suburban	42.7%	49.1%%***[a]	19.1%*[c]	34.6%**[b]
Rural	16.2%	18.3%**[a]	8.37%**[a]	10.7%
Missing	0%			
Marital Status:				
Married	11.9%	13.3%***[a]	4.9%***[a]	14.5%**[c]
Divorced/Separated/Widowed	25.4%	26.8%*[a]	18.6%*[a]	20.0%
Never married	62.2%	59.3%***[a]	76.0%***[a]	65.4%
Missing	.5%			
Poverty Status:				
Poor	54.2%	52.5%**[a]	65.7%**[a]	58.0%*[c]
Non-poor	29.6%	32.9%	16.2%	24.6%
Missing	16.2%	14.7%	18.1%	17.3%
Violent Victimization	16.4%	15.2%	17.0%	18.6%
Missing				

[a] = White vs. Black; [b]= White vs. Hispanic; [c] = Hispanic vs. Black. *p<.05; **p<.01; ***p<.001.

victims of sexual violence. I will limit my discussion only to those differences that have been found to be statistically significant.

Since victims of rape and sexual assault make-up about 1% of the sample, and victims of violent crimes (excluding rape and sexual assault) about 9 %, the descriptive statistics in Table 4.11 reflect indicators primarily for the female victims of property offenses. Even for this sample, the age differences between the three racial-ethnic groups are highly (at 99.9%) statistically significant, with Hispanic females showing the youngest mean age (35.7), and White women exhibiting oldest mean age (45.1) among the victims of non-violent crime. Among the categories by place of residence, only suburban shows equally strong statistical differences between the three groups of females, with White females displaying the highest percent residing in suburban areas (54.6%), and Black females – the lowest proportion of suburban residents (34.3%). The differences in the proportion of urban residents are also statistically significant among all three groups but on various levels of significance. Black females have a statistically higher proportion of urban residents (52.7%) compared to Hispanic women (at p<.05). White females have the lowest share of urban residents (only 23%) among the three groups, and this estimate is statistically different from the estimates for both Black (52.7%) and Hispanic women (47.1%) at p<.001. The estimates for the numbers of rural residents are also statistically different between the three racial-ethnic subgroups. Hispanic females have the lowest proportion of respondents in the sample residing in rural areas (only 7.3%), and this estimate is statistically lower than the estimate for Black females (13.1%) at p<.05. The percentages for numbers of rural residents are also statistically different between White (22.4%) and Black (13.1%) females, but with a higher level of statistical certainty (p<.001). The distributions on all the subcategories of marital

status variables are highly statistically different among all the group pairs. Black females demonstrate the highest proportion of never married females (close to 46%),compared to Hispanic females (at 37%), and, especially, White females (at 24%). Black females also show considerably lower proportion of married women (only 27%), compared to 46% for Hispanic and 53% of White females. Hispanic women show the lowest percentage for the divorced, separated and widowed subcategory. On the poverty variable, the differences between the three groups are highly statistically significant across all pairs. However, these estimates should be treated with caution because of the amount and nature of the missing data. The issue with the missing data for this sample has been previously discussed in the Data and Methods chapter. Finally, with respect to the violent victimization (excluding rape and sexual assault), the differences on this indicator are statistically significant for White - Black and Black - Hispanic pairs but insignificant for White - Hispanic pair. White females show the lowest percentage (.98%) for violent victimization among the three groups, while Black females demonstrate the highest estimate (1.4%).

Table 4.12 demonstrates similar statistics for the subsample of victims of rape and sexual assault. First, I should note the change in the distribution by race and ethnicity. The number of White females has decreased from 71.1% in the full sample to 69.9% for victims of rape and sexual assault, the percentage of Black females has risen from 12.4% in the full sample to 15.8% among victims of rape and sexual assault, and the proportion of Hispanic victims has gone down from 11.3% to 8.6%. It is also immediately noticeable that, in Table 4.12, there are no variables that are highly statistically different across all pairs of subgroups, and the overall number of statistical differences between the three racial-ethnic subgroups of women is smaller than for the full sample. This means that the subgroups of women have

become somewhat more uniform as we move from the sample of victims of 90% property crime to the victims of rape and sexual assault. However, there are still certain statistically different parameters between the groups that need to be addressed.

From the point of view of percentages of urban residents, the differences between White (32.6%) and Black (72.5%) women are highly statistically significant (at p<. 001). The estimate of urban residents for Black women (72.5%) is also statistically higher than the estimate for Hispanic females (54.7) but only at p<.05. The estimates for this subcategory are not statistically different between White and Hispanic females. With respect to the proportion of suburban residents, the strongest statistically significant differences are observed between Black (19.1%) and White (42.7%) females (at p<.001). As it has been the case with the full sample, in the subsample of the victims of rape and sexual assault, White females show the highest percentage of suburban residents among the three groups, whereas, for the Black females, this percentage is the lowest, and the gap between the two estimates is quite substantial (30%). The estimate for suburban residents for White women is also statistically higher than the estimate for Hispanic females, at p<.01. Finally, the estimates for this subcategory of place of residence are statistically different between Black and Hispanic females as well but only at p<.05.

The statistics on marital status categories for the three groups also display some significant differences, but the extent of these differences is reduced compared to the differences in the full sample. The percentage of married women for White females is statistically higher (13.3%) than that of the Black women (4.9%) at p<. 001. The percentage of married females for Black women is also significantly lower than that of the Hispanic women (14.5%), but this difference is slightly less strong - at p<. 01. With respect to the

never married subcategory, statistically significant differences (at p<. 001) are only found between White (59.3%) and Black women (76.0%), with Hispanic women displaying the mid-level category for this variable: 65.4%. For divorced, separated and widowed women, the differences are statistically significant (at p<. 05) also only between the White (26.8%) and Black (18.6%) females, with Hispanic women once again displaying the mid-level category at 20.0%. With respect to the poverty indicator, the percentage of poor Black females – victims of rape and sexual assault (65.7%) is statistically higher than the corresponding estimate for White female victims of sexual victimization (52.5%) at p<.001. The percentage for Black females is also statistically higher than the percentage of poor Hispanic female victims of sexual violence (58%) at p<.05.

Based on the results from Tables 4.11-4.12, although the subsamples of women from the three racial-ethnic groups seem to become more uniform as we move from the sample comprised by victims of non-violence at 90% towards the sample of victims of rape and sexual assault, the between-group differences are still profound, especially with respect to the distributions by place of residence and marital status. The between-group differences with respect to age and violent victimization disappear for female victims of rape and sexual assault.

The next step in the analysis is running bivariate survey-weighted logistic regression of rape and sexual assault, including the racial-ethnic subcategories as sole predictor variables. The results of bivariate survey-weighted regression of rape/sexual assault by race and ethnicity are shown in Table 4.13.

Based on these results, all three categories by race and ethnicity are statistically significant predictors of rape and sexual assault, but the strength of this relationship varies, depending on a specific racial-ethnic indicator. The model shows greatest differences between Hispanic and Black females (at p<.001). Compared to Black females, Hispanic women are significantly less likely to become victims of rape and sexual assault. Compared to Black females, White females are also statistically less likely (at p<.01) to become victims of sexual violence. When the comparison is made against the White subcategory, Hispanic women are statistically less likely to become sexually victimized (at p<.05). Thus, based on the bivariate model, Hispanic subcategory is a protective factor against rape and sexual assault compared both to White and Black subgroups. Between White and Black subgroups, White females are at a lower risk for the rape and sexual assault victimization compared to Black females, with Black racial-ethnic indicator being a risk-factor for sexual victimization compared to both White and Hispanic females.

Table 4.13. Bivariate Survey-Weighted Logistic Regression of Rape/Sexual Assault by Race and Ethnicity (n=2,236,192).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-.25	.109	*
Hispanic (vs. Black)	-.51	.133	***
Black (vs. White)	.26	.093	**

*p<.05; **p<.01; ***p<.001. "Other" category was also included in the model but is not shown here.

The bivariate model is just a preliminary step in the analysis of the relationship between race and ethnicity. The next step consists in a series of step-wise intermediate regression

models, including each of the predictor factors alone and all possible combinations of the predictive factors. The main objective of such step-wise analysis is to reveal how individual predictors or a combination of certain predictors affect the coefficients for racial-ethnic indicators. The results of these analyses are shown in Table 4.14: each row of the table represents a separate model (each of which was run twice, first using Hispanic, and then White, as a reference category for race and ethnicity). The table shows some interesting results.

The differences between White and Hispanic subcategories of women remain statistically significant in all the models. Compared to the base (bivariate) model with race and ethnicity as the only independent variable, the statistical power of this relationship only increases as other predictor factors are introduced into the model. Compared to Whites Hispanics represent have lower rates of rape and sexual assault. The differences between White and Hispanic females are the strongest (coefficients of .9 and higher at p<.001) in the models that include age, poverty, place of residence; age, poverty, place of residence and marital status; and age, poverty, place of residence and violent victimization. The three common variables in these models are age, poverty and violent victimization: these factors seem to have the strongest impact increasing the differences between White and Hispanic females with respect to the risk of rape and sexual assault victimization.

The differences between Hispanic and Black females are more or less constant across the models, with a membership in the Hispanic racial-ethnic subgroup representing a protective factor compared to Black females, as well. But the protective effect of Hispanic in comparison to Black is slightly less robust than the protective effect of Hispanic in comparison to White: it loses statistical significance in two of the models. The two models

where the differences between Black and Hispanic females lose their statistical significance include poverty, place of residence, marital status, and violent victimization; and place of residence, marital status and violent victimization. Hence, it seems that place of residence, marital status and violent victimization collectively can explain a considerable proportion of the differences between Black and Hispanic females with respect to the risk of rape and sexual assault victimization. And simultaneously controlling for all three of these factors makes these differences statistically insignificant. Based on the models where each of these three predictor factors is introduced alone, in addition to the racial-ethnic subcategories, marital status seems to have the strongest effect, reducing the differences between Black and Hispanic females with respect to the rape and sexual assault victimization (coefficient of.3 at $p<. 05$).

With the exception of the two aforementioned models, the differences between Black and Hispanic females remain statistically significant, with a membership in the Hispanic racial-ethnic subcategory representing a protective factor against rape and sexual assault, compared to the Black racial-ethnic subgroup. The extent of the differences is highest (coefficient of .6 and higher at $p<.001$) in the models including the following predictors: age; age and poverty; age and place of residence; and age, poverty and place of residence. The results highlight age as a factor that strengthens racial-ethnic differences between Black and Hispanic subgroups of women the most with respect to sexual victimization. It is also notable in this case that when age is introduced into the model in addition to place of residence, marital status and violent victimization, the differences between Black and Hispanic females regain their statistical power and become significant at $p <.01$. Hence, the results of the intermediate

130

Table 4.14: Results Matrix for Intermediate Models of Survey-Weighted Logistic Regression of Rape/Sexual Assault for Full Sample of Female Victims, n=2,236,192. (Each row represents a separate model).

Black (vs. White)	Black (vs. Hispanic)	White (vs. Hispanic)	Age	Poor	Suburban	Urban	Never married	Divorced/ Separated/ Widowed	Violent Victimization
Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
.26**(.09)	.51***(.13)	.25*(.11)							
.04(.09)	.64***(.13)	.61***(.11)	-.06***(.00)						
.07(.11)	.54***(.16)	.47***(.12)		.89***(.07)					
.11(.09)	.48***(.13)	.37**(.11)			-.01 (.11)	.48***(.12)			
-.14(.09)	.30*(.13)	.44***(.11)					2.2***(.10)	1.6***(.11)	
.21*(.09)	.46**(.13)	.25*(.11)							2.9***(.08)
-.21(.11)	.65***(.15)	.86***(.12)	-.06***(.00)	1.0***(.07)					
-.10(.09)	.62***(.13)	.72***(.11)	-.06***(.00)		-.03(.11)	.45***(.12)			
-.10(.09)	.50***(.13)	.62***(.11)	-.06***(.00)				.99***(.12)	2.1***(.11)	
.01(.09)	.57***(.13)	.57***(.11)	-.05***(.00)						2.5***(.08)
-.23*(.09)	.28*(.13)	.51***(.11)			-.04(.11)	.31**(.12)	2.2***(.10)	1.5***(.11)	
-.24*(.09)	.31*(.15)	.67***(.12)		.63***(.08)	.12(.13)	.42**(.13)	2.1***(.11)	1.4***(.12)	
-.36**(.11)	.27(.15)	.63***(.12)		.58***(.08)	.17(.12)	.39**(.13)	2.0***(.11)	1.3***(.12)	2.4***(.10)
-.08(.11)	.53***(.15)	.61***(.12)		.88***(.07)	.21(.13)	.63***(.13)			
-.28*(.11)	.31*(.15)	.59***(.12)		.64***(.07)			2.2***(.11)	1.4***(.12)	
.03(.11)	.48**(.15)	.45***(.12)		.81***(.07)					2.7***(.09)
.06(.09)	.43**(.13)	.37**(.11)			-.01(.11)	.44***(.12)			2.9***(.08)
-.15(.09)	.26*(.13)	.42***(.11)					2.1***(.10)	1.5***(.11)	2.6***(.08)
-.33**(.11)	.65***(.15)	.98***(.12)	-.06***(.00)	1.0***(.07)	.22(.13)	.58***(.13)			
-.28*(.11)	.51**(.15)	.78***(.12)	-.06***(.00)	.79***(.07)			1.0***(.12)	1.9***(.12)	
-.21(.11)	.58***(.15)	.79***(.12)	-.05***(.00)	.93***(.07)					2.3***(.10)
-.11(.11)	.47**(.15)	.58***(.12)		. 81***(.07)	.19(.12)	.58***(.13)			2.7***(.10)

Black (vs. White)	Black (vs. Hispanic)	White (vs. Hispanic)	Age	Poor	Suburban	Urban	Never married	Divorced/ Separated/ Widowed	Violent Victimization
-.37**(.11)	.31*(.15)	.67***(.12)		.63***(.08)	.12(.13)	.42**(.13)	2.1***(.11)	1.4***(.12)	
Coef (SE)	**Coef (SE)**	**Coef (SE)**	**Coef (SE)**	**Coef (SE)**	**Coef (SE)**	**Coef (SE)**	**Coef (SE)**	**Coef (SE)**	**Coef (SE)**
-.24*(.09)	.24(.13)	.48***(.11)			-.03(.11)	.28*(.11)	2.0***(.10)	1.6***(.11)	2.6***(.11)
-.39***(.11)	.51**(.15)	.90***(.12)	-.06***(.00)	.77***(.07)	.18***(.12)	.53***(.13)	.93***(.12)	1.9***(.11)	
-.23*(.09)	.43**(.11)	.66***(.11)	-.06***(.00)		-.00(.11)	.39**(.11)	.94***(.12)	1.9***(.11)	2.3***(.09)
-.33**(.11)	.57***(.15)	.90***(.12)	-.05***(.00)	.92***(.07)	.20(.12)	.54***(.13)			2.3***(.10)
-.27*(.11)	.46**(.15)	.73***(.13)	-.05***(.00)	.72***(.07)			.97***(.13)	1.8***(.12)	2.1***(.10)

*p<.05; **p<.01; ***p<.001. "Other" category was also included in all the models, but is omitted here. For the models that include poverty variable, n= 1,814,067 (due to the list-wise deletion of observations with missing values on this variable).

models highlight age, and, somewhat less so, poverty, as the factors making the differences between Hispanic and Black women especially pronounced. At the same time, these models highlight place of residence, marital status and violent victimization collectively as factors making Black and Hispanic women statistically similar when it comes to the rape and sexual assault victimization.

The results of the intermediate models are especially revealing with respect to the intricacies of the differences between White and Black racial-ethnic subgroups in relation to the risk of rape and sexual assault victimization. In the base model, Black racial-ethnic membership represents a risk factor for rape and sexual assault in comparison with White racial-ethnic category. However, the Black category loses its statistical significance as a risk factor compared to White immediately as any one of the predictive factors is introduced into the model, with the exception of the model where violent victimization is the only other independent variable in addition to racial-ethnic categories. This finding alone is a strong indication that the initial statistically significant effect, associated with Black being a risk factor for sexual victimization in comparison to White, is largely explained by other predictors included in the model. Subsequently, Black does not only shift signs, but becomes a statistically significant protective factor in comparison to White racial-ethnic category. There are several models where the latter effect is present. The strongest statistical difference between these two subgroups is represented in the model that includes age, poverty, place of residence, and marital status. In these models, place of residence, marital status, and poverty are present nine out of twelve times; and violent victimization is present in five out of twelve models. These findings indicate that when place of residence, marital status, and poverty (and less so, violent victimization) are controlled for, Black racial-ethnic membership becomes a

statistically significant protective factor in comparison to White. These are the key factors explaining the shift in the effects of the Black and White indicators on rape and sexual assault victimization.

Intermediate analyses also reveal important information about other predictor variables. The effect of the age is very robust, with the coefficient for this variable (-.06 - -.05) staying almost constant across all the models. Violent victimization shows the strongest effect on the rape and sexual assault victimization compared to other predictor factors in all the models, where violent victimization is present. Never married is also a very strong predictor for sexual victimization. However, when age is introduced into a model at the same time when never married is present, the coefficients of the never married variables are reduced in power, and it may appear that never married is a less strong of a predictor for sexual victimization compared to the divorced/separated/widowed category. The explanation for this effect is the fact that age (at the younger end of the spectrum) and never married variables measure the same population of women, to a considerable extent.

The final analysis, used to answer RQ4, consists in a multivariate survey-weighted logistic regression of rape and sexual assault, simultaneously including all the predictor variables: race and ethnicity, marital status, place of residence, poverty status, and violent victimization. Table 4.15 shows the results of the full-model survey-weighted logistic regression of rape and sexual assault. Introduction of the other predictor variables into the model has resulted in some notable changes in the relationship between racial-ethnic indicators and sexual victimization, compared to the results of the bivariate model. However, most of these changes are fully expected, following the outcomes of the intermediate models. The relationship between membership in the Hispanic racial-ethnic subcategory and rape and

sexual assault victimization has increased its statistical power, with Hispanic being a negative predictor of rape and sexual assault compared both to Black and White females. Thus, full-model results also highlight Hispanic racial-ethnic membership as a strong protective factor against rape and sexual assault victimization compared to the two other racial-ethnic subcategories. The most notable change compared to the bivariate model is associated with the effect of the Black racial-ethnic indicator on the rape and sexual assault victimization, when White subcategory is used as a reference. Compared to White women, being Black now has a negative effect on the risk of the rape and sexual assault victimization. The magnitude of statistical significance of this relationship has decreased from 99% to 95% compared to the bivariate model. However, this shift does not come as a surprise after the analysis of the intermediate models. Such a change in the effect of the Black racial-ethnic indicator on rape and sexual assault victimization compared to White racial-ethnic indicator is another indication that most of the original effect measured by the bivariate model is explained by other predictors included in the full model. Based on the intermediate model, we already know that the key variables associated with this change are place of residence, marital status, and poverty. The results of the full-model analysis also indicates that urban, never married, divorced/separated/widowed, and poverty variables are strong, statistically significant positive predictors for the rape and sexual assault victimization, while age is a strongly statistically significant negative predictor for sexual victimization. From descriptive analyses, we know, that there are strong statistical differences between Black and White females on these indicators. So this may further explain the shift in the effects of Black and White racial-ethnic memberships on the rape and sexual assault victimization, when other predictor factors are included into the analysis.

135

Table 4.15: Multivariate Full Model Survey-Weighted Regression of Rape and Sexual Assault (n=1,814,067).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-.83	.12	***
Hispanic (vs. Black)	-.46	.15	**
Black (vs. White)	-.38	.11	**
Age	-.06	.00	***
Poor	.71	.08	***
Suburban	.17	.12	
Urban	.50	.13	***
Never married	.93	.13	***
Divorced/Separated/Widowed	1.8	.12	***
Violent Victimization	2.1	.10	***

*p<.05; **p<.01; ***p<.001. "Other" category was also included in the model but is omitted here. For the models that include poverty variable, n= 1,814,067 (due to the list-wise deletion of observations with missing values on this variable).

Overall, based on the full-model results, White females show the highest risk for sexual victimization compared to both Black and Hispanic women. Hispanic women have preserved their status of the lowest risk category for rape and sexual assault, based on the results of the full model, as well. Even more so, the differences between Hispanic and White and Black and Hispanic females have become even larger compared to the bivariate model.

In addition to the main analyses with the rape and sexual assault victimization as the dependent variable, I have also conducted a series of full-model survey-weighted logistic regressions, using various subtypes of rape and sexual assault (i.e. incident characteristics) as dependent variables in order to identify potential differences in the predictor factor for

individual subtypes. The results of these analyses are shown in the Appendix. Here I will selectively discuss notable differences in the predictor factors for the individual subtypes compared to the full-model results for rape and sexual assault victimization.

With respect to the repeat rape and sexual assault victimization, fewer predictors are statistically significant. Only differences between Hispanic and Black racial-ethnic memberships are significant at 95%, with Hispanic subgroup representing a protective factor compared to Black. Poverty and urban residence are not significant in their effects on the risk of repeat rape and sexual assault victimization. For the series rape and sexual assault, the number of significant predictors is reduced even further. Differences between racial-ethnic subgroups are no longer statistically significant for this subtype of rape and sexual assault. As they are measured by the NCVS, series victimizations would most likely indicate victimizations by the same offender, because these incidents should be indistinguishable in their details. Hence, this type of victimization has a lot to do with the specifics of the relationship between the victim and the offender, making some of the other factors irrelevant. For this reason, poverty, urban residence and being never married lose their significance as predictors as well when series rape and sexual assault victimizations are concerned. The results indicate that being never married does not significantly increase the risk for the series sexual victimization, but being divorced/separated/widowed does. This may also mean that highest-risk victims for rape and sexual assault are younger than highest-risk victims for series sexual victimization.

For the rape and sexual assault resulting in serious injury, the differences are the strongest between Hispanic and White women; the differences are less strong but statistically significant between Hispanic and Black females. However, the differences between Black

and White females are statistically insignificant with respect to the risk of rape and sexual assault victimization resulting in serious injury. The rest of the predictor factors show the same effects as in the main model with rape and sexual assault. The differences are not statistically significant between any of the pairs by race and ethnicity when rape/sexual assault with a weapon is used as the dependent variable. For this subtype of rape and sexual assault, urban residence also loses its statistical significance as a risk factor.

With respect to the subtypes of rape and sexual assault by victim-offender relationship, noteworthy differences can be observed in the models with stranger rapes and sexual assaults and known offender rapes and sexual assaults used as dependent variables. For stranger rapes and sexual assaults, Hispanic and Black women are no longer statistically different in their risk levels. This may be explained by the earlier finding that, proportionally, Hispanic women report more stranger rapes and sexual assaults than Black (and White) females.

Most notably, suburban becomes statistically significant risk factor for the sexual victimization by a stranger. This is an interesting finding because suburban is not significant in any other models, including any of the intermediate models. Hence, suburban residence may have certain criminogenic effects specific for stranger rapes and sexual assaults, which are not present for any other type of rape and sexual assault. Just as a speculation, it may have something to do with the fact that suburban areas would have high numbers of women who stay at home during the day, hence presenting an available target (whose location may be predicted) without a capable guardian present.

For rape and sexual assaults by intimate partner, Black and White females are no longer statistically different with respect to their risk levels. Urban residence also loses its statistical significance when sexual victimization by intimate partners is concerned.

Based on the analyses, involving individual subtypes of rape and sexual assault, racial-ethnic differences retain their statistical power in most of them. However, for the series rape and sexual assault victimization, and sexual victimization with a weapon, the differences in the levels of risk become insignificant for all the pairs by race and ethnicity. For intimate partner and stranger rapes and sexual assaults as well as repeat sexual victimization and sexual victimization, resulting in serious injury, changes can be observed in statistical power of the differences for certain pairs of racial-ethnic subgroups.

Research Question 4 asked if the indicators of race and ethnicity have statistically significant effects on the risk of the rape and sexual assault victimization, and how these relationships change when other predictor variables are introduced into the model. The results indicate that all three racial-ethnic indicators are statistically significant in their effects on the rape and sexual assault victimization. The results of the bivariate analyses indicate the lowest risk for Hispanic subcategory compared both to White and Black females, and the highest risk for Black racial-ethnic subgroup compared both to White and Hispanic. However, these relationships change as other predictor factors are introduced into the analysis. The differences between White and Hispanic women with respect to the risk of rape and sexual assault victimization remain robust and statistically significant in all the models, with Hispanic racial-ethnic membership representing a low-risk subgroup compared to the White subcategory. Strongest differences between these two subgroups are observed in the models with age, poverty, and violent victimization. The differences between Black and

Hispanic women are somewhat less robust, but Hispanic remains lowest-risk in all the models with Black as a reference category. However statistical differences between Hispanic and Black women disappear when place of residence, marital status, and violent victimization are simultaneously introduced into the model. The differences between these subgroups become especially pronounced when age (and less so, poverty) is introduced into the model.

Finally, the differences between Black and White subcategories of women undergo a dramatic change between the bivariate and multivariate models. Black racial-ethnic membership becomes a low-risk category with respect to rape and sexual assault compared to White racial-ethnic membership. The key variables associated with this shift include place of residence, marital status, and poverty.

RQ5: Are there racial-ethnic differences in the effects and effect patterns of the named sociodemographic variables on the risk of rape/sexual assault victimization?

This question attempts to isolate the effects of the independent variables on rape and sexual assault victimization for each of the three racial-ethnic groups. It also analyzes how these sociodemographic variables may interact with each other in their effects on the risk of rape and sexual assault victimization for females from these racial- ethnic groups. To answer this research question, as a preliminary step, I conduct a series of descriptive analyses. Tables 4.16-4.18 compare descriptive statistics separately for the subsets of White, Black and Hispanic women for the two samples: full sample (i.e. (90% victims of non-violence) and

Table 4.16: Descriptive Statistics for Two Subsets of Non-Hispanic White Females, NCVS 1994-2010.

Variable	Percentage or Mean	
	Full Sample	*Rape and Sexual Assault Victims*
	(n = 4,198,479,127)	*(n=5,751,517)*
Age	45.1***	27.3***
Place of Residence:		
Urban	23%***	32.6%***
Suburban	54.6%**	49.1%**
Rural	22.4%*	18.3%*
Marital Status:		
Married	52.9%***	13.3%***
Divorced/Separated/Widowed	22.1%**	26.8%**
Never married	24.3%***	59.3%***
Poor	30.0%***	52.5%***
Violent Victimization	.98%***	15.2%***

*p<.05; **p<.01; ***p<.001.

victims of rape and sexual assault, and highlight within-group differences between the characteristics of these subsamples for each racial-ethnic subset of females. As with previous analyses, I will limit my discussion to statistically significant results.

Table 4.16 shows descriptive statistics for the two subsets of White females. For this racial-ethnic group, the differences between the two subsets are statistically significant on all the indicators for predictor factors. The differences in the mean ages are highly statistically significant (at p<.001) between the two subsamples. The mean age becomes younger as we

move from the full sample of white females (45.1) to the subsample of white female victims of rape and sexual assault (27.3). The differences in the proportions of married and never married females are also highly statistically significant between victims of primarily non-violence and victims of rape and sexual assault. The proportion of married women is highest (52.9%) and the proportion of never married women is lowest (24.3%) for the full sample. The percentage of married women is lowest (13.3%), and the percentage of never married females is highest (59.3) for a sample of white female victims of rape and sexual assault. The proportions of white females in poverty are also highly statistically different between the two subsamples: 30% - for the full sample of white females, and 52.5% for the White female victims of rape and sexual assault. The differences are also statistically significant at $p<.001$ with respect to the proportion of urban residents: 23% for the full sample of White females and 32.6% for the subsample of White female victims of sexual victimization. Finally, indicators for violent victimization are also highly statistically different between White female victims of primarily non-violent crimes (.98%) and White female victims of rape and sexual assault (15.2%).

The differences in the distributions of the remaining predictor variables are also significant but at lower levels of statistical certainty: with respect to the proportion of suburban residents at $p<.01$; for the proportion of rural residents at $p<.05$, and finally, based on the percentage of divorced/separated/widowed females, the differences are statistically significant between the full sample of white females (22.1%) and the subset of victims of rape and sexual assault (26.8%) at $p<.01$.

Table 4.17: Descriptive Statistics for Two Subsets of Non-Hispanic Black Females, NCVS 1994-2010.

Variable	Percentage or Mean	
	Full Sample *(n = 731,631,050)*	*Rape and Sexual Assault Victims* *(n=907,406)*
Age	39.5***	26.0***
Place of Residence:		
Urban	52.7%***	72.5%***
Suburban	34.3%***	19.1%***
Rural	13.1%*	8.37%*
Marital Status:		
Married	26.9%***	4.9%***
Divorced/Separated/Widowed	25.9%*	18.6%*
Never married	45.8%***	76.0%***
Poor	47.8%***	65.7%***
Violent Victimization	1.4%***	17.0%***

*p<.05; **p<.01; ***p<.001.

Table 4.17 shows similar descriptive statistics for the three subsets of Black females. For this racial-ethnic subgroup, the differences between Black female victims of primarily non-violence and Black female victims of rape and sexual assault are also statistically significant on all the indicators for the predictor factors. The differences are statistically significant at p<.001 for age, urban, suburban, married, never married, poverty, and violent victimization. The differences between the two subsets are significant on divorced/separated/widowed and rural variables at p<.05.

Tables 4.16 and 4.17 provide strong indication that, for White and Black racial-ethnic groups, victims of rape and sexual assaults are statistically different from victims of non-violence on all the included measures for independent variables. However, this is not the case for the subgroup of Hispanic females (as shown in Table 4.18).

For Hispanic women, the differences between the two subsamples are highly statistically different only for age, percentage of married females, percentage of never married females, and the percentage of victims of other violent victimization. The differences between the proportions of suburban populations are significant only at $p < .05$, i.e. the statistical power of this difference is lower than for both White and Black females. Finally, the differences between the two subsamples of Hispanic women are insignificant for the percentage of urban residents, percentage of rural residents, percentage of divorced/separated/widowed, and the percentage of females in poverty. This is a preliminary indication that these factors may be less relevant for Hispanic subgroup as factors affecting the risk of rape and sexual assault victimization, compared to White and Black subcategories of women. Also, the findings from Tables 4.16-4.18 emphasize similarities between White and Black subgroups and differences of Hispanic subgroup from both White and Black subcategories.

Table 4.18: Descriptive Statistics for Two Subsets of Hispanic/Latina Females, NCVS 1994-2010.

Variable	Percentage or Mean	
	Full Sample	*Rape and Sexual Assault Victims*
	(n = 665,400,055)	*(n=6,751,080)*
Age	35.7***	25.5***
Place of Residence:		
Urban	47.1%	54.7%
Suburban	45.6%*	34.6%*
Rural	7.26%	10.7%
Marital Status:		
Married	46.3%***	14.5%***
Divorced/Separated/Widowed	16.4%	20.0%
Never married	36.8%***	65.4%***
Poor	30.7%	58.0%
Violent Victimization	1.0%***	18.6%***

*p<.05; **p<.01; ***p<.001.

The next step in the analysis consists in multivariate survey-weighted logistic regressions conducted separately for each of the racial-ethnic subsets of women, including all the

Table 4.19: Full-Model Survey-Weighted Logistic Regressions of Rape and Sexual Assault for Subsets of Non-Hispanic White, Non-Hispanic Black and Hispanic/Latina Females (Three Separate Models), NCVS 1994-2010.

Predictor Variable	White n=1,307,654			Black n=200,754			Hispanic n=207,418		
	Coef	SE	Sig	Coef	SE	Sig	Coef	SE	Sig
Age	-.06	.00	***	-.05	.01	***	-.04	.012	**
Poor	.84	.08	***	.48	.23	*	.19	.27	
Suburban	.24	.13		.04	.40		-.34	.42	
Urban	.52	.14	***	.87	.37	*	-.07	.41	
Never married	.84	.14	***	1.2	.40	**	1.3	.35	***
Divorced/Separated/Widowed	1.7	.14	***	1.7	.48	***	1.9	.35	***
Violent Victimization	2.1	.11	***	2.0	.27	***	2.7	.29	***

Significant z-scores: White-Hispanic: poor (z=2.3), violent victimization (z=-2.3).

predictor variables. Full-model results with rape and sexual assault as the dependent variable

are shown collectively for the three models for each of the three subgroups of women in

Table 4.19.   The common effects for all three subcategories of women include

divorced/separated/widowed and violent victimization as highly statistically significant risk

factors for rape and sexual assault victimization. Never married is also a strong risk factor for

all three racial-ethnic subcategories, but the magnitude of statistical power for this predictor

is slightly reduced for Black females – at p<.01. Age is also a statistically significant and

negative predictor for all three groups of women (it is significant at p<.01 for the Hispanic

subgroup). If we compare White and Black subcategories of women, their models display

similar results from the point of view of what predictors show a statistically significant

relationship with rape and sexual assault victimization. In addition to the aforementioned

significant predictors, urban residence is a positive predictor for the sexual victimization at

p<.001 for White women and at p<.05 for Black females. Being never married is also

statistically significant and positive for both Black and White subgroups (at p<.001 for

White, whereas only at p<.01 for Black females). Poverty is also statistically significant at in

its effect on the rape and sexual assault victimization for both White and Black females.

Comparisons between these two models reveal similarities between these two subcategories

of women with respect to significant predictors of rape and sexual assault victimization. On

the surface, it may seem that these predictors have stronger effects on the risk of rape and

sexual assault victimization for White females compared to Black. However, post-estimation

z-score analyses reveal no statistically significant differences for any of the coefficients

between Black and White subcategories of women.

The model with Hispanic females shows noticeable differences compared to the models for White and Black females. Notwithstanding White and Black subcategories, urban residence and poverty do not constitute statistically significant predictors for rape and sexual assault for Hispanic females. Post-estimation z-score analyses revealed statistical differences for some of the coefficients only between Hispanic and White subcategories. The coefficient for the poverty variable is statistically stronger for the White subgroup (z=2.3), while the coefficient for violent victimization is statistically stronger for Hispanic females (z=-2.3).

Thus, based on the models, there are notable differences of White and Black subcategories from the Hispanic racial-ethnic subgroup of women in terms of the effects of predictor variables. Urban residence and poverty are not statistically significant for Hispanic females, but are significant positive predictors of sexual victimization for both White and Black females. Same predictor factors are statistically significant for White and Black subcategories of women, and z-score post-model estimation analyses do not show any statistically significant differences between the coefficients for these groups.

The aforementioned analyses for RQ5 provide some evidence in favor of a positive answer to this research question, i.e. that there are racial-ethnic differences in the effects and patterns of effects the predictor variables included in the model have on rape and sexual assault. These analyses produce important and meaningful findings. However, it is still unclear what kind of sizes these effects have and how they compare across the subgroups. In order to answer this question more clearly, as a final step, I have analyzed predicted probabilities for the risk of rape and sexual assault victimization. The estimates have been obtained by race and ethnicity as base estimates, for each of the predictor variables, and cumulatively for two highest risk categories (with and without violent victimization).

Table 4.20: Predicted Probabilities for Racial-Ethnic Subgroups' Risks for Rape/Sexual Assault by Predictor Factors: Females Only, NCVS 1994-2010.

Factors	Rate per 10,000		
	Non-Hispanic White	Non-Hispanic Black	Hispanic/Latina
	10	12	7
Age=27	16 (+60%)	16 (+33%)	8 (+14%)
Urban Residence	14 (+40%)	15 (+25%)	9 (+29%)
Suburban Residence	8 (-20%)	9 (-25%)	6 (-14%)
Rural Residence	8 (-20%)	9 (-25%)	6 (-14%)
Never married	23 (+130%)	20 (+67%)	15 (+114%)
Divorced/Separated/Widowed	12 (+20%)	11 (-9%)	8 (+14%)
Married	2 (-80%)	2 (-83%)	2 (-71%)
Poor	16 (+60%)	17 (+42%)	10 (+43%)
Victims of Other Violence	152 (+1420%)	186 (+1450%)	118 (+1586%)
Highest risk (age=27, urban, divorced/separated/widowed, poor, victims of other violence)	528 (+5180%)	369 (+2975)	237 (+3285%)
Highest risk (excluding other violent victimization)	67 (+570%)	46 (+300%)	29 (+314%)

Percent change values relative to the level of risk predicted by race and ethnicity alone are shown in parentheses.

Table 4.20 shows predicted probabilities for the risk of rape and sexual assault for each of the racial-ethnic groups. The first row shows predicted probabilities for the risk of sexual victimization, based on racial-ethnic indicator alone. Black women show the highest level of risk (12 in 10,000 females), while Hispanic females exhibit the lowest level of risk (7 in 10,000), with White females falling midway (10 per 10,000). The table also shows changes in the predicted probabilities for the risk of rape and sexual assault associated with each of the predictor variables on top of the effect of the race and ethnicity. Percent change values for the predicted probabilities, produced by the corresponding predictor variable, relative to the level of risk predicted by the racial-ethnic indicator alone, are shown in parentheses.

For all three racial-ethnic categories, the biggest and most drastic change in the predicted probabilities (excluding the cumulative highest risk categories) for rape and sexual assault is associated with other violent victimization: the risk increases by 1,420% for White (with predicted risk of 152 in 10,000 females), by 1,450% for Black (with predicted risk of 186 in 10, 000 females), and by 1,586% for Hispanic females (with predicted risk of 118 in 10,000 women). For this reason, I have included two highest-risk profiles, with and without violent victimization, because the predicted probabilities vary dramatically between the two. The strongest protective factor is also common for the three racial-ethnic subgroups of women and is represented by being married. For White females, it reduces the risk of sexual victimization by 80%, for Black females this effect equals 83%, and for Hispanic females, being married reduces the risk of sexual victimization by 71%. It should also be noted that both suburban and rural residence categories are associated with lower rates for all three racial-ethnic subgroups, with strongest protective effects for Black women (-25% on both).

The analyses also reveal important differences between the three racial-ethnic subgroups of females. White females show the highest effect sizes (i.e. percent change values) between the three groups for several predictor variables: age (+ 60%), urban residence (+ 40%), never married (+130%), divorced/separated/widowed (+20%), and for both cumulative highest risk categories (+ 5180 with violent victimization and +570% without violent victimization). These results show that White women are most vulnerable to the effects of these factors among the three subgroups. Also, the White subgroup shows highest values for the predicted risk of rape and sexual assault among the three categories of women for both of the highest risk categories (528 in 10,000 with violent victimization (compared to 369 in 10,000 for Black and 237 in 10,000 for Hispanic females) and 67 in 10,000 excluding violent victimization (compared to 46 in 10,000 for Black and 29 in 10,000 for Hispanic females)), as well as for never married category (23 in 10,000 (compared to 20 in 10,000 for Black and 15 in 10,000 for Hispanic females). For such factor as the age of 27, the risk for sexual victimization for White females equals that of Black females – 16 in 10,000 females. At the same time, there are no indicators, for which White racial-ethnic subgroup would display the smallest effect size or the smallest value for the predicted risk. Thus, the results for the White women further indicate that this subgroup exhibits more variance when the predictor factors are included into the analyses compared to both Black and Hispanic women.

Black females, on the other hand, show smallest effect sizes among the three subgroups of women on a number of indicators: urban residence (+25%), never married (+67%), divorced/separated/widowed (-9%), and for both of the highest risk categories (+2,976 with violent victimization, and + 300% excluding violent victimization). It is also notable that divorced/separated/widowed represents a mild protective factor for the Black subgroup,

although it is a risk factor for both White and Hispanic females. Thus, the results for the Black women seem to be indicative of a certain level of resilience for this racial-ethnic category against the effects of the predictor factors on the risk of rape and sexual assault victimization.

Hispanic females show the highest effect size among the three groups only on a single predictor factor - violent victimization (+ 1,586%). This is another indication that the factors associated with a high risk of other violent victimization are especially detrimental for Hispanic women (it was earlier indicated by the statistically stronger coefficient for violent victimization in the model for the Hispanic subgroup, compared to the White subgroup) in their effects on the risk of sexual victimization, as well. It may also indicate that, for Hispanic women, risk factors for violent victimization and risk factors for rape and sexual assault are more similar than for the other two subgroups of women.

On the majority of other indicators the effect sizes for Hispanic racial-ethnic group fall mid-way between White and Black subgroups. These indicators include urban residence (+29%), never married (+114%), divorced/separated/widowed (+14%), poverty (+43%), and both of the highest risk categories (+2,975 with violent victimization and +314 excluding violent victimization). On the remaining indicators, Hispanic subgroup shows lowest effect sizes among the three racial-ethnic subcategories: age (+14%), negative effects of suburban and rural residence (-14% on both), and negative effect of the married category (-71%). With respect to the predicted risk for rape and sexual assault, the values for Hispanic women are lowest on all the indicators, including both cumulative highest-risk categories. Thus, the results for Hispanic females further confirm the finding that Hispanic women represent the lowest-risk category for rape and sexual assault among the three racial-ethnic groups.

Overall, RQ 5 asked if there were racial-ethnic differences in the effects and effect patterns of the predictor factors on the risk of rape and sexual assault victimization. The results of the analyses have presented evidence that such differences are present. The findings indicate that Hispanic women are different from both White and Black females: poverty and urban residence do not constitute statistically significant risk factors for sexual victimization for this group of women. Also, Hispanic females constitute the lowest risk category for sexual victimization, based on all the analyses. The findings also reveal similarities between White and Black women in terms of the relevant predictors for rape and sexual assault. However, the analyses also revealed important differences between the two groups of females. White females show largest variance associated with a number of important predictors and both cumulative highest risk categories, while Black females exhibit lowest variance on these important predictors. These results testify in favor of increased effects of the included factors on the risk of rape and sexual assault for White females compared both to Hispanic and, especially, Black females. Same demonstrate weakest effects of the same predictors on the risk of rape and sexual assault for Black compared both to Hispanic and, especially, White females.

Chapter 5: Discussion and Conclusions

In this concluding chapter, I will discuss how findings of this research fit with the literature and prior research, what substantive contribution they make, what questions have been answered and which ones still remain unanswered. I will also address possible directions for future research.

The major objective of this research has been to gain a better understanding of the relationship between race and ethnicity and sexual victimization for females in the United States as well as of the interrelations between racial-ethnic membership and known risk factors for rape and sexual assault in their effects on rape and sexual assault victimization. I have attempted to isolate the effect(s) race and ethnicity have on the risk and level of sexual victimization, and to better understand how membership in a racial-ethnic subcategory interacts with other relevant sociodemographic factors, such as age, marital status, place of residence, poverty status, and other violent victimization in its effect(s) on the risk of rape and sexual assault victimization. Since this research uses the NCVS, i.e. self-report data, another important goal has been to single out potential effects the NCVS methodology may have on the reporting of rape and sexual assault, and find out whether females from different racial-ethnic groups exhibit meaningful differences in their willingness and readiness to report their sexual victimization experiences to the interviewers, and whether there are differences in their reporting behaviors that may affect the estimates, based on the NCVS.

The analyses of the productivity of the questions on the NCVS screener, which are instrumental in eliciting information on rape and sexual assault, have emphasized the increased level of productivity for the questions that include direct reference to rape and sexual assault behaviors and name them explicitly. There are two of these questions in the

154

NCVS screener, and both of them yield highest proportions of positive responses with respect to rape and sexual assault. This evidence indicates that repetitive questioning using explicit behaviorally specific cues is effective in encouraging female respondents to report such sensitive experiences as sexual victimization. These findings may also mean that it would be beneficial to include one or two additional behaviorally specific questions directly targeting information on rape and sexual assault into the NCVS screener. This suggestion is in line with some of the recommendations put forth by the National Research Council (2014) in their report on *Estimating the Incidence of Rape and Sexual Assault*. They conclude that the current wording of the questions on the survey, including such words as "rape" and "sexual assault" may be interpreted differently by individual survey respondents. Hence, they recommend making the wording of the questions associated with rape and sexual assault more specific using more behaviorally specific words to ensure consistent understanding and interpretation by all respondents, as a result, increasing completeness and accuracy of the answers (p. 8).

I have found no meaningful differences in the dynamics and patterns of reporting by race and ethnicity. The analyses of cuing did not reveal any statistically significant differences in the required number of cues by race and ethnicity, nor have they identified substantive differences in the dynamics of reporting. In fact, the analyses have revealed a surprisingly uniform pattern of reporting by race and ethnicity with respect to the productivity of the questions on the screener. Some variation has been uncovered associated with the level of importance women from different racial-ethnic groups may attach to less serious behaviors included into the measure of rape and sexual assault. The findings indicate that Hispanic females may grant more importance to these less serious actions and report them at a higher

rate compared to the other two subgroups. At the same time, Black females may under-report these behaviors on the basis that they are not important enough compared to other more serious cases of rape and sexual assault. But these differences are not profound enough and are not likely to bias estimates of rape and sexual assaults by race and ethnicity, based on the NCVS data.

Most importantly, analyses of the methodological and other external factors, that may potentially affect reporting, have revealed important differences. Based on the fact that Black females have statistically larger proportion of in-person interviews (that is somewhat balanced out by the fact that these females also have the highest proportion of cases when a third person or persons are present during the interview) compared to White and Hispanic female respondents, the findings may indicate that Black females may be put in a more favorable situation with respect to the likelihood of reporting compared to the other two groups. The impact of this bias is hard to estimate, and at this point, it is unclear what kind of effect (if any) it may have on the estimates of rape and sexual assault by race and ethnicity, based on the NCVS data. Some information to clarify the issue may be found in the report by the National Research Council (2014). Citing a study by Yu, Stasny, and Lin (2008), the panel concludes that rape is reported to the NCVS at a rate 1.45 times higher in personal interviews compared to telephone interviews. The same study estimates that approximately 37% of women did not report their victimizations by any type of personal crime (with the exception of larceny) in the course of interviews conducted over the telephone (Yu et al., 2008). At the same time, the panel of the National Research Council (2014) concludes that a lack of privacy during interviews may negatively affect reporting of sexual victimization. *"The panel believes that privacy in interviewing about sexual violence is critical because*

most rapes and sexual assaults are committed by individuals whom the victim knows. The offender may, in fact, be member of the household. Another possibility is that a teenager has been a victim of date rape but has not told his or her parents. A respondent who has been sexually victimized may not report the victimization if that reporting may be overheard or otherwise inferred by another household member" (NRC, 2014, p. 145). Thus, the increased lack of privacy for the Black females during the in-person interviews compared to the other two subgroups of women somewhat cancels out the effect of the larger proportion of in-person interviews for this racial-ethnic subgroup. The net effect of these factors is unclear. However, based on this finding, the findings about group differences in this research should be interpreted with some caution.

I should also mention that the major weakness associated with the analyses of cuing and reporting employed in the current study is in the fact that there is no way to know and/or estimate the proportion of rape and sexual assault incidents that remain unreported to the NCVS, and whether these proportions vary significantly by race and ethnicity. Based on what we know about the reporting of rape and sexual assault, female victims report more cases to the NCVS than they do to the police. So NCVS registers more cases than the police, but the "dark figure of crime" is a common problem for both, although to varying extents. Nonetheless, the evidence produced by this research should be considered along with other evidence about how methodology may affect self-reporting of rape and sexual assault.

With respect to the substantive questions asked in this research, the results indicate with certainty that race and ethnicity is a relevant factor and predictor when it comes to the rape and sexual assault victimization. I have found important substantive differences in the effects of White, Black and Hispanic racial-ethnic memberships on the risk and level of rape and

sexual assault victimization, and in the interactions between these racial-ethnic categories and other predictor factors included in the analyses. But before I discuss these differences, I would like to discuss some of the findings that are common across the three groups, and contribute to our understanding of the factors affecting sexual victimization.

Based on the findings in this study, violent victimization (other than rape and sexual assault) is the strongest and most robust risk factor for rape and sexual assault victimization. This means that sexual victimization shares many common risk factors with violence against women in general. Hence, any and all successful prevention efforts for violence against women would appear to make a considerable difference combating sexual violence, as well. Findings also indicate that being married is the most powerful factor reducing the levels of rape and sexual assault victimization across the three racial-ethnic groups of women. The analysis of predicted probabilities for the risk of rape and sexual assault for married females shows an identical low level of risk for all three racial-ethnic subcategories (2 in 10,000). This finding also has substantive implications in directing sexual violence prevention efforts: efforts associated with restoring and strengthening the social institution of the family in American communities may also be effective with respect to reducing levels of sexual victimization.

At the same time, even controlling for other violent victimization, other factors, such as age, being poor, urban residence, being never married or divorced/separated/widowed still retain their statistical significance as predictors for rape and sexual assault victimization, which means that they have specific effects on the sexual victimization compared to violent victimization of women. Young age is a known risk factor for violent victimization: this effect can be explained, based on the lifestyle and routine activities approaches (Hindelang et

al., 1978; Cohen & Felson, 1979). Young females tend to be more socially active and spend more time away from home, hence, experiencing a higher risk of finding themselves in a situation without a capable guardian present, at the same time representing attractive victims that are physically vulnerable. However, these explanations do not account for why age increases the risk specifically for sexual victimization, when violent victimization is controlled for.   One of the possible explanations could be that young age increases the risk for sexual victimization by making a female more attractive target physically. Physical appeal may be a factor that is relevant for sexual victimization, but it is less likely to be relevant for other violence.

   Possible explanation for the significance of urban residence and being single (i.e. never married or divorced/separated/widowed) as risk factors for rape and sexual assault victimization is based on the lifestyle and routine activities approaches. Single women in an urban setting are a lot more likely to find themselves in the absence of suitable guardians, in situations where they become suitable targets and run into motivated offenders (Cohen & Felson, 1979). Urban settings offer more options for leisure and entertainment, and a single-female lifestyle is not associated with the role expectations of a married woman, which would make most of her activities home- and family-oriented and safer, as a result (Hindelang et al., 1978). Hence, never married and divorced/separated/widowed females are more likely to find themselves in a situation with a heightened risk for rape and sexual assault. Another important consideration is that single females are likely to date and be in search of a partner, which increases their victimization risk through associations with potential offenders, according to the lifestyle theory (Hindelang et al., 1978).

It is harder to find an immediate explanation as to why poverty would constitute a risk factor specifically for sexual victimization, controlling for the general violence. Poverty is certainly associated with the lack of resources, including protective resources against victimization. However, this may explain why poor women are more likely to be victims of any violent crime, and is not specific to sexual victimization.

One of possible explanations may be found in some of the race-specific approaches to explaining violence that I have discussed in the previous chapters. Some scholars identify racism and racial discrimination as an explanation for domestic and specifically sexual domestic violence among Blacks and other minority groups (e.g.: Burns, 1986; Koss et al., 1994; Gilroy, 1993; Harper, 1996). Domestic violence is viewed as a maladaptive but compensatory response to social and economic pressures that deny black males the opportunity accorded to their white counterparts and breed self-contempt (Stark, 2003, p. 191; Hampton & Yung, 1996). The same logic and rationale may be applied to men of all racial-ethnic origins who find themselves in conditions of poverty, i.e. conditions of increased stress and resentment, and may use sexual violence as a coping mechanism.

Based on this part of the analyses, the findings indicate that although exposure to the conditions associated with other violent victimization is a very strong predictor for rape and sexual assault victimization as well, it is not the sole explanation. Sexual victimization may share common predictors with violent victimization, but these predictors have effects on sexual victimization that are specific for sexual victimization and separate from the effects these factors have on violent victimization.

As I have mentioned earlier, this research has uncovered important information about the effects of memberships in various racial-ethnic groups on rape and sexual assault

victimization, and how these effects are mediated by the other predictor factors. The findings also shed light on the underlying mechanisms of the differences between the three racial-ethnic groups of women with respect to the risk of rape and sexual assault.

Results of the bivariate regression on rape and sexual assault by racial-ethnic indicators and predicted probabilities for the risk of rape and sexual assault victimization based solely on racial-ethnic indicators pose membership in the Black racial-ethnic subgroup as a strong risk factor for sexual victimization. According to the base predicted probabilities, it is the highest risk category for rape and sexual assault among the three racial-ethnic groups. However, upon closer examination, it becomes apparent that this effect is largely explained by other factors included into the analyses.

Intermediate step-wise and full model analyses have demonstrated that controlling for certain predictor factors, Black racial-ethnic subgroup (compared to White) first loses its statistical significance as a risk factor for rape and sexual assault, then shifts signs and becomes a protective factor, compared to White, and, finally, gains statistical significance as a protective factor against rape and sexual assault, revealing White racial-ethnic membership as a risk-factor for sexual victimization. Closer examination of the individual models identifies place of residence, marital status and poverty as the key factors responsible for this dramatic shift. The analyses also revealed that the differences between Black and Hispanic women disappear when place of residence, marital status and violent victimization are simultaneously introduced into the model. In other words, the differences between Black and Hispanic females with respect to the rape and sexual assault victimization are largely explained by the cumulative effect of these three factors. Descriptive analyses of the samples for Black women revealed important differences of the Black racial-ethnic subgroup from the

other two subgroups of women with respect to the indicators of these sociodemographic factors. Black females show highest proportions of unmarried women, urban residents, poor women, and the highest proportion of victims of other violent crimes. This finding is hardly surprising and corresponds with what we know about the Black subgroup and their position within the American society.

As I have previously discussed, it is a well-documented fact that race and poverty are confounded in the U.S. (Sampson & Lauritsen, 1997; Wilson, 1988, Sampson & Wilson, 1995), and even though some progress has been made, the problem of racial discrimination and concentrated disadvantage still persists for Blacks (Miller, 2008). There is a wealth of historical and scholarly evidence of prolonged and severe discrimination against the Black racial-ethnic group and their extensive exposure to criminogenic contextual factors, which resulted in their disadvantaged position within American society. Black females, as a minority group that has been subjected to severe racial discrimination within the American society, have been exposed to the factors for a long time, during which they may have developed certain cultural adaptations to these factors of structural disadvantage.

This idea is supported by a number of theoretical paradigms. Miller (2008) situated her conceptualization of a *rape culture*, defined as "*a set of values and beliefs that promote an environment conducive to rape*" (p.4) and specific to Black disadvantaged and isolated communities within the urban setting. Her ideas echo those of Anderson (1999) with his conceptualization of the "*code of the streets*" as "*behavioral expectations for young men in disadvantaged communities that emphasize masculine reputation and respect, achieved through presentations of self that emphasize toughness and independence, a willingness to use violence, and heterosexual prowess demonstrated by means of sexual conquest*" (p. 8).

Both Anderson and Miller situate the culture condoning and encouraging rape in the inner-city communities. This idea is supported by the findings in this research. My findings put forth urban residence as one of the key mechanisms explaining the differences between Black females from both White and Hispanic females with respect to the risk of rape and sexual assault victimization.

Also, relevant here is the idea of a culture of "un-marriageability", described by Wilson (1996), which may have been assimilated into the measure of Black female, as well. As it has been previously discussed, Wilson (1996) documented that severe economic disadvantage and social isolation in impoverished Black communities were creating unmarriageable young man, who were not able to provide for a family or become responsible fathers, and women did not aspire to get married because of the lack of attractive candidates. Men also shared this general lack of becoming husbands for the same reasons: they did not want or could not afford the burden of having a dependent or dependents. This general effect is also supported by the findings in this research which puts forth being never married as another key underlying mechanism behind the differences between Black and White and Black and Hispanic female when it comes to the risk of sexual victimization.

My findings also demonstrate that the effect sizes for these additional demographic factors on the level of risk for sexual victimization are weakest for Black females compared to Hispanic, and, especially, White females. The explanation may be in the fact that having been exposed to the detrimental effects of these factors for decades and decades, Black females have developed some level of resilience to the effects of the factors associated with structural disadvantage. Such resilience exhibited by Black females towards the risk factors with respect to the rape and sexual assault may be explained by their cultural adaptations in

the form of the "code of the streets" (Anderson, 1999), culture of un-marriageability (Wilson, 1996), and culture of rape and violence (Miller, 2008). This resilience developed in the course of a prolonged and severe exposure to the risk factors for rape and sexual assault may also serve as part of the explanation for the finding that Black racial-ethnic membership becomes a statistically significant protective factor against rape and sexual assault, when other factors are controlled for. This protective effect may be to some degree associated with Black females being more adapt to these adverse factors than White or Hispanic women.

The same findings identify White racial-ethnic subgroup as a risk factor for sexual victimization compared to both Black and Hispanic women. It is accurate to say that the results for White subgroup are identical to Black subgroup but with the opposite sign. Thus, controlling for the same key factors, including place of residence, marital status, and poverty, identifies being a White female as a risk factor for rape and sexual assault. The findings also demonstrate that the effect sizes of several predictor factors on the risk of sexual victimization are highest for White females, and White females display highest values for both of the cumulative highest risk profiles. This evidence indicates that White females are especially vulnerable to the effects of the factors associated with structural disadvantage. Since the observed resilience of the Black subgroup can logically be explained by the specifics of their position within the American society, it also seems logical to apply the same rationale to explain the results shown by the White subgroup. White females represent a group that has historically had an opposite status in the American society compared to the Black females. White females represent the majority population, and, as such, they have not been exposed to a prolonged and severe discrimination resulting in a highly disadvantaged position. Compared to Black, White females are more vulnerable towards the criminogenic

effects of the predictor factors because they are much less adapt to the conditions of structural disadvantage as Black females are likely to be.

The results of the current study provide important insights into the mechanisms underlying the differences between White and Black females in their risk levels for sexual victimization. However, they do not tell the whole story. The finding that, even controlling for all the predictor factors, both Black and White subcategories still retain their statistical significance as predictors for rape and sexual assault victimization indicates that there are certain effects associated with memberships in the Black and White racial-ethnic subgroups that are not measured by any of the factors included in the present study.

The current research has also produced important and interesting findings regarding Hispanic racial-ethnic membership and its effects on rape and sexual assault. Compared to White and Black subgroups, Hispanic subgroup is the most robust protective factor against rape and sexual assault victimization. Based on all the results, Hispanic females represent the lowest category, from the point of view of the risk of sexual victimization. With respect to the effect sizes for the predictive factors, Hispanic subgroup falls midway between White and Black subcategories. As I have previously mentioned, the differences between Hispanic and Black females are largely explained collectively by place of residence, marital status, and violent victimization. Other violent victimization is also one of the factors associated with strongest differences between Hispanic and White females. Based on the results of the post-model estimation analyses and analyses of predicted probabilities, we know that other violent victimization has the strongest positive impact on the risk of sexual victimization for Hispanic women compared to both of the other subgroups. Thus, findings indicate that the

level of sexual victimization for Hispanic females exhibit most variance associated with the conditions of other violent victimization.

The findings also demonstrate that the key factors that set Hispanic women apart from both Black and White women with respect to the risk of sexual victimization include age, poverty and urban residence. It is unclear what kind of mechanism is responsible for the finding that age amplifies the differences between Hispanic and both of the other subgroups, i.e. giving Hispanic subcategory more statistical power as a protective factor against sexual victimization compared to both White and Black females. The descriptive analyses show youngest mean age for Hispanic women for both the full sample and a subsample of victims of rape and sexual assault. Based on these indicators, it would be logical to expect for age to reduce the protective effect of the Hispanic racial-ethnic category. But this is not supported by the data. The explanation may have to do with the finding in the previous studies showing that indicators of age/sex composition do not always relate to crime in the predicted manner, which suggests that the generalizability of individual-level relationships to the macro-level is more complicated than it can be expected (South & Messner, 1990; Messner & Sampson, 1991; Messner & South, 2000). It is also possible that age is a marker for certain other factors associated specifically with being Hispanic, and more research is necessary to identify these factors.

As for the other two factors, i.e., urban residence and poverty, the descriptive analyses reveal that, with respect to the proportion of urban residents, the estimate for Hispanic women is very close to the estimate for Black females for the full sample. For the sample of victims of rape and sexual assault, the percentage for urban residents among Hispanic females falls midway between the estimates for Black and White women. The latter effect is

the same for the proportion of Hispanic females in poverty for the sample of victims of rape and sexual assault. The effect sizes for these predictors for the Hispanic subgroup also fall mid-way between strong effects for White females and weak effects for Black females, i.e. showing mid-way level of resilience or mid-way level of vulnerability to these factors. Based on the fact that Hispanic women, just like Black women, represent a minority population within the American society, and in accordance with my original hypothesis, I expected to find similarities between Black and Hispanic women with respect to the risk of rape and sexual assault victimization. Although Hispanic women show a much lower risk for sexual victimization compared to Black women, similar mechanisms may explain the level of impact the predictor factors have on the risk of sexual victimization for both groups. Common status as minority populations for the two subgroups is associated with common factors of structural disadvantage, such as poverty and higher concentration of urban residents.

As I have previously mentioned, research studies indicate that Black and Hispanic women find themselves at an elevated risk of chronic poverty, which creates stress that can place minority women at an elevated risk of violence (Benson, Fox, Demaris, & Van Wyk, 2000; Frias & Angel, 2005). This is also confirmed by the current poverty statistics, showing 25.3% Hispanics and 25.8% Black females living in poverty (U.S. Census Bureau, Current Population Survey, 2009 & 2010). At the same time, Blacks have been exposed to these factors for much longer time and arguably with a higher level of severity. Hispanic subgroup also includes substantial numbers of recent immigrants, who have not been exposed to the unfavorable structural factors associated with minority status for a prolonged period of time. This fact makes them objectively different from the Black population that may not be

experiencing an influx of new immigrants in high numbers. These considerations testify to the fact that Black females have had greater exposure to these factors; hence, they display a higher level of resilience to these factors, compared to Hispanic women. At the same time, Hispanic women have been exposed to these factors more than White females, and as a result, Hispanic women do not show the same level of vulnerability towards these factors as White females.

As with Black and White females, the current study does not provide a complete explanation of the relationship between Hispanic racial-ethnic membership and the risk of rape and sexual assault victimization. One of important findings is that the Hispanic subcategory is a strong negative predictor for the risk of sexual victimization in all the models, excluding only two intermediate step-wise analyses. Part of the explanation for this phenomenon has been offered above, but there is certainly more to the effect associated with being a Hispanic female, which is not explained by any of the included measures. One of alarming possibilities is that Hispanic women may be under-reporting rape and sexual assault at a higher rate compared to White and Black women due to various factors, including methodological factors and factors associated with traditional Hispanic cultural norms and beliefs.

Also, as I have previously mentioned, the measures included in the current analysis are limited to sociodemographic factors, which are primarily structural (or represent reasonable proxies). Although these analyses do yield important understanding of the mechanisms mediating the relationship between race and ethnicity and sexual victimization, they are unable to provide a comprehensive explanation. One of the important limitations of this research is that my models do not contain measures of neighborhood and community

168

characteristics, direct measures of lifestyle, or cultural measures - all of which are essential for a more or less complete explanation for the relationship between race and ethnicity and sexual victimization. So my findings provide important but preliminary information about the underpinnings of this relationship. More research is needed to fully understand the complex and multi-faceted relationship between race and ethnicity and sexual and violent victimization. This study has found evidence to support the existence of this relationship and uncovered important mechanisms of this relationship mediated by sociodemographic factors.

One of the important directions for future research is to look at this relationship over time. In this research, I have taken a cross-sectional approach. However, NCVS data is a valuable tool allowing looking at the relationship between race and ethnicity and sexual victimization over time in order to see whether this relationship has been changing differently for different racial-ethnic groups. Another promising direction is expanding the focus of the study to include a full range of serious violent victimization against females, and subsequently males, in order to confirm or disconfirm, and further understand findings in this research. Including all types of serious violent victimization would allow for including a wider range of racial-ethnic categories, including American Asians and American Indians. Finally, an important direction for future research is including measures of various natures (e.g. cultural, lifestyle, structural) in the models aimed at explaining the relationship of race and ethnicity and rape and sexual assault victimization (however, this largely depends on the availability of necessary data).

REFERENCES

Ahart, A. M., & Sackett, P. R. (2004). A new method of examining relationships between individual difference measures and sensitive behavior criteria: Evaluating the unmatched count technique. *Organizational Research Method*, 7, 101-114.

Akers, R. L., & Sellers, C. S. (2004). *Criminological theory*. Los-Angeles, CA: Roxbury.

Alvarez, D., Bean, E, and Williams, D. (1981). The Mexican American family. In C. H. Mindel & R. Habenstein (Eds.), *Ethnic families in America* (pp. 269-292). New York: Elsevier Science.

Amir, M. (1971). *Patterns in Forcible Rape*. NY: Lexington Books.

Anderson, E. (1978). *A Place on the Corner*. Chicago: University of Chicago Press.

Anderson, E. (1990). *Streetwise: Race, Class, and Change in an Urban Community*. Chicago: University of Chicago Press.

Anderson, E. (1999). *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*. New York: Norton.

Auletta, K. (1982). *The Underclass*. New York: Random House.

Bachman, R. (1992). Crime in nonmetropolitan areas: A national accounting of trends, incidence rates, and idiosyncratic vulnerabilities. *Rural Sociology* 57: 546-560.

Bachman, R. and Saltzman, L. (1995). *Violence Against Women: Estimates from the Redesigned Survey*. U.S. Department of Justice (Bureau of Justice Statistics).

Bachman, R., Zaykowski, H., Kallmyer, R., Poteyeva, M., and Lanier, C. (2008). *Violence Against American Indian and Alaska Native Women and the Criminal Justice Response: What is Known*. Washington, D.C.: U.S. Department of Justice.

Benson, M.L., Fox, G.L., DeMaris, A. and Van Wyk, J. (2003). Neighborhood disadvantage, individual economic distress and violence against women in intimate relationships. *Journal of Quantitative Criminology* 19: 207-236.

Bernard, T. (1990). Angry aggression among the truly disadvantaged. Criminology, 28, pp. 173-94.

Bielby, D., Bielby, W. (1984). Work commitment, sex-role attitudes, and women's employment. American Sociological Review, 49(2), pp. 234-47.

Blau, J. and Blau, P. (1982). The cost of inequality: Metropolitan structure and violent crime. *American Sociological Review* 47, pp. 114-29.

Brearley, H. (1934). The pattern of violence. In *Culture in the South*, ed. W. Couch, 678-92. Chapel Hill: University of North Carolina Press.

Brownmiller, S. (1975). *Against our will: Men, women, and rape*. Simon & Shuster.

Bruce, M. and Roscigno, V. (2003). "Race effects" and conceptual ambiguity in violence research: Bringing inequality back in. In Hawkins, D. (ed.) *Violent Crime: Assessing Race and Ethnic Differences*. Cambridge University Press.

Bureau of Justice Statistics (2002). Criminal Victimization in the United States, 1994-2000. Washington, D.C.: Office of Justice Programs, U.S. Department of Justice.

Bureau of Justice Statistics (2013). Female Victims of Sexual Violence, 1994-2010. Special Report. Washington, D.C.: Office of Justice Programs, U.S. Department of Justice.

Burns, M. (ed.) (1986). *The Speaking Profits Us: Violence in the Cries of Women of Color*. Seattle, WA: Center for the Prevention of Sexual and Domestic Violence.

Campbell, R. (2008). The psychological impact of rape victims' experiences with the legal, medical, and mental health systems. *American Psychologist*, 63, 702-717.

Chong, N., Baez, F. (2005). *Latino Culture: A Dynamic Force in the Changing American Workplace*. Yarmouth, ME: Intercultural Press.

Cohen, L., Felson., M. (1979). Social change and crime trends: A routine activity approach. *American Sociological Review*, 44 (4), pp. 588-608.

Comer, J. (1985). Black violence and public policy. In *American Violence and Public Policy*, ed. L. Curtis, 63-86. New Haven, CT: Yale University Press.

Cook, S., Gidycz., Ch., Koss, M., & Murphy, M. (2011). Emerging issues in the measurement of rape victimization. *Violence Against Women*, 17(2), pp. 201-218.

Covington, J. (2003). The violent black male: Conceptions of race in criminological theories. In Hawkins, D. (ed.) *Violent Crime: Assessing Race and Ethnic Differences*. Cambridge University Press

Crowel, N. and Burgess, A. (ed.) (1996). Understanding Violence Against Women. Washington, D.C.: National Research Council, National Academy Press.

Cunradi, C., caetano, R., Schafer,J. (2002). Socioeconomic predictors of intimate partner violence among White, Black, and Hispanic couples in the United States. *Journal of Family Violence*, 17, pp. 377-89.

Curtis, L. (1975). *Violence, Race, and Culture*. Lexington, MA: Lexington Books.

Dalton, D. R., Wimbush, J. C., & Daily, C. M. (1994). Using the unmatched count technique (UCT) to estimate base rates for sensitive behavior. *Personnel Psychology*, 47, 817-828.

Droitcour, J., Caspar, R. A., Hubbard, M. L., Parsley, T. L., Visscher, W., & Ezzati, T. M. (1991). *The item count technique as a method of indirect questioning: A review of its development and a case study application.* In P. P. Biemer, R. M. Groves, L. E. Lyberg, N. A. Mathiowitz, & S. Sudman (Eds.), Measurement errors in surveys (pp. 185-210). New York: John Wiley.

Dugan, L. and Apel, R. (2003). An exploratory study of the violent victimization of women: Race/ethnicity and situational context. *Criminology* 41: 959-977.

Dugger K. (1988). Social location and gender role attitudes: A comparison of black and white women. *Gender and Society*, 2(4), pp. 425-48.

Dutton, D. (1995). The Domestic Assault of Women: Psychological and Criminal Justice Perspectives. Vancouver, BC: UBC Press.

Edwards, K. M., Desai, A. D., Gidycz, C. A., & VanWynsberghe, A. (2009). College women's aggression in relationships: The role of childhood and adolescent victimization. *Psychology of Women Quarterly*, 33, 255-265.

Elliott, D., Wilson, W., Huizinga, D., Sampson, R., Elliott, A., Ranjkin,B. (1996). The effects of neighborhood disadvantage on adolescent development. *Journal of Research in Crime and Delinquency*, 33, 389-426.

Ellis, L. (1990). Introduction: The nature of the biosocial perspective. In *Crime in Biological, Social and Moral Contexts*, ed. L. Ellis and H. Hoffman, 3-17. New York: Praeger.

Ellis, L. and Walsh, A. (1997). Gene-based evolutionary theories in criminology. *Criminology* 35, pp. 229-76.

Fagan, J. and Wilkinson, D. (1998). Guns, youth violence and social identity in inner cities. In Crime and Justice: Annual Review of Research, ed. M. Tonry, M. Moore, 24, pp. 105-88. Chicago: Univ. Chicago Press.

Falicov, C. (1984). Mexican families. In M. Mc- Goldrick, J. K. Pierce, & G. Giordano (Eds.), *Ethnicity and Family Therapy* (pp. 134-163). New York: Guilford.

Farrington, D., Loeber, R., and Stouthamer-Loeber, M. (2003). How can the relationship between race and violence be explained? In Hawkins, D. (ed.) *Violent Crime: Assessing Race and Ethnic Differences*, pp. 213-38. Cambridge University Press.

Federal Bureau of Investigation. (2011). Crime in the United States, 2011. Available: http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011 [March 2013].

Federal Bureau of Investigation. (2012, January 6). Attorney General Eric Holder Announces Revisions to the Uniform Crime Report's Definition of Rape [Press release]. Available:http://www.fbi.gov/news/pressrel/press-releases/attorney-general-eric-

holder-announcesrevisions-to-the-uniform-crime-reports-definition-of-rape[March 2013].

Feldberg, R. L., and E. N. Glenn. (1979). Male and female: Job versus gender models in the sociology of work. Social Problems 26, 524-38.

Felson, M. (1998). *Crime and everyday life: Impact and implications for society*. Thousand Oaks, CA.

Fisher, B. S., & Cullen, F. T. (2000). Measuring the sexual victimization of women: Evolution, current controversies and future research. *Measurement and Analysis of Crime and Justice*, 4, 317-390.

Fisher, B., Cullen, F., and Turner, M. (2000). *The Sexual Victimization of College Women*. Washington, D.C.: Office of Justice Programs, U.S. Department of Justice.

Fisher, B., Daigle, L., Cullen, F., and Turner, M. (2003). Reporting sexual victimization to the police and others: Results from a national-level study of college women. *Criminal Justice and Behavior*, 30(1), 6-38.

Fisher, B., Daigle, L., & Cullen, T. (2008). Rape against women: What can research offer too guide development of prevention programs and risk reduction interventions? *Journal of Contemporary Criminal Justice*, 24, pp. 163-177.

Flores, E., Eyre, S. L., & Millstein, S. G. (1998). Sociocultural beliefs related to sex among Mexican American adolescents. *Hispanic Journal of Behavioral Sciences*, 20, 60-82.

Ford, K., & Norris, A. E. (1993). Urban Hispanic adolescents and young adults: Relationship of acculturation to sexual behavior. *Journal of Sex Research*, 30, pp. 316-323.

Fraga, E. (2008). Latinos. In Cross-Cultural Counseling. Thousand Oaks, CA: SAGE Publications, vol. 3, pp. 1192-1198.

Frias, S. and Angel, R. (2005). The risk of partner violence among low-income Hispanic subgroups. *Journal of Marriage and Family*, 67(3), pp. 552-64.

Fulenwider, C. (1980). *Feminism in American Politics: A Study of Ideological Influence*. New York: Praeger.

Gibbs, J. (1988). *Young, Black, and Male in America: An Endangered Species*. New York: Auburn House.

Gilroy, P. (1993). *Small Acts: Thoughts on the Politics of Black Cultures*. London: Serpent Tail.

Greenfeld, L., Rand, M., Craven, D., Mason, C., and Fox, J. (1998). *Violence by Intimates: Analysis of Data on Crimes by Current or Former Spouses, Boyfriends, and Girlfriends.* Washington, D.C.: U.S. Department of Justice.

Hampton, R. and Yung, B. (1996). Violence in communities of color. Where we were, where we are and where we need to be. In *Preventing Violence in America*, ed. R. Hampton, P. Jenkins, and T. Gullotta, 53-86. Thousand Oaks, CA: Sage.

Hannerz, U. (1969). Soulside: Inquiries into Ghetto Culture and Community. New York: Columbia University Press.

Harper, P. (1996). *Are We Not Men? Masculine Anxiety and the Problem of African American Identity*. New York: Oxford University Press.

Harris, R., Firestone, J. (1998). Changes in predictors of gender role ideologies among women: A multivariate analysis. *Sex Roles* 38(3-4), pp.239-52.

Hatchett, S., Quick, A. (1983). Correlates of sex role attitudes among black men and women: Data from a national survey of black Americans. Inst. Urban Aff. Res. 9(2),pp. 1-11.

Hawkins, D. (1987). Devalued lives and racial stereotypes: Ideological barriers to the prevention of family violence among blacks. In *Violence in the Black Family*, ed. R. Hampton, 189-207. Lexington, MA: Lexington Books.

Hawkins, D. (1993). Crime and ethnicity. In The Socioeconomics of Crime and Justice, ed. B. Forst, 89-120. Armonk: NY.

Hawkins, D. (ed.) (2003). *Violent Crime: Assessing Race and Ethnic Differences*. Cambridge University Press.

Herrnstein, R. and Murray, C. (1994). *The Bell Curve*. New York: Free Press.

Hindelang, M., Gottfredson, M., & Garofalo, J. (1978). *Victims of Personal Crime: An Empirical Foundation for a Theory of Personal Victimization*. Cambridge, Mass., Ballinger.

Hunter, A., Sellers, S. (1998). Feminist attitudes among African American women and men. *Gender and Society*, 12(1), pp. 81-99.

Ishii-Kuntz, M. (2000). Diversity within Asian American families. In *Handbook of Family Diversity*, ed. D. Demo, K. Allen, and M. Fine. New York: Oxford University Press.

Jang, S. (2002). Race, ethnicity and deviance: A study of Asian and Non-Asian adolescents in America. *Sociological Forum*, 17 (4), pp. 647-680.

Jones, O. (1999). Sex, culture, and the biology of rape: Toward explanation and prevention. California Law Review, 87(4), pp. 827-941.

Kahn, A. S., & Andreoli Mathie, V. A. (2000). Understanding the unacknowledged rape victim. In C. B. Travis & J. W. White (Eds.), *Sexuality, society, and feminism: Psychological perspectives on women* (pp. 377-403). Washington, DC: American Psychological Association.

Kane, E. (2000). Racial and ethnic variations in gender-related attitudes. *Annual Review of Sociology*, 26, pp. 419-39.

Kane, E., Sanchez, L. (1994). Family status and criticism of gender inequality at home and at work. *Social Forces*, 72, 1079-1102.

Kennedy, L. W., & Forde, D. R. (1999). *When push comes to shove. A routine conflict approach to violence*. SUNY Press, Albany, NY.

Kibria, N. (1990). Power, patriarchy and gender conflict in the Vietnamese immigrant community. *Gender & Society* 4, pp. 9-24.

Kaufman Kantor, G., Jasinski, J. L., & Aldarondo, E. (1994). Sociocultural status and incidence of marital violence in Hispanic families. *Violence and Victims*, 9, pp. 207-22.

Kilpatrick, D. G. (2004). What is violence against women? Defining and measuring the problem. *Journal of Interpersonal Violence*, 19, 1209-1234.

Kilpatrick, D.G., Edmunds, C.N., and Seymour, A. (1992). *Rape in America: A Report to the Nation*. Charleston: Medical School University of South Carolina, National Victim Center and Crime Victims Research and Treatment Center.

Kilpatrick, D., MacCauley, J., and Mattem, G. (2009). Understanding national rape statistics. VAWnet Applied Research Forum. Available at http://new.vawnet.org/Assoc_Files_VAWnet/AR_RapeStatistics.pdf.

Kluegel J. and Smith, E. (1986). Beliefs about Inequality: Americans' Views of What Is and What Ought to Be. New York: Aldine

Kornhauser, R. (1978). *Social Sources of Delinquency: An Appraisal of Analytic Models*. Chicago: University of Chicago Press.

Koss, M. P. (1985). The hidden rape victim: Personality, attitudinal, and situational characteristics. *Psychology of Women Quarterly*, 9, 193-212.

Koss, M. P. (1992). The underdetection of rape: Methodological choices influence incidence estimates. *Journal of Social Issues*, 48, 61-75.

Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization among a national sample of students in higher education. *Journal of Consulting and Clinical Psychology*, 55, 162-170.

Koss, M. P., & Oros, C. J. (1982). The Sexual Experiences Survey: An empirical instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology*, 50, 455-457.

Koss, M. , et al. (1994). No Safe Haven: Male Violence against Women at Home, at Work and in the Community. Washington, D.C.: American Psychological Association.

Koss, M. (1996). The measurement of rape victimization in crime surveys. *Criminal Justice and Behavior, 23 (55).*

Koss, M. P., White, J., & Kazdin, A. E. (2010a). Violence against women and children: Perspectives and next steps. In M. Koss & J. White (Eds.), *Violence against women and children: Navigating Solutions* (Vol. 2). Washington DC: American Psychological Association.

Koss, M. P., White, J., & Kazdin, A. E. (Eds.). (2010b). *Violence against women and children: Navigating Solutions* (Vol. 2). Washington, DC: American Psychological Association.

Krebs, Ch., Lindquist, Ch., Warner, T., Fisher, B., Martin, S., & Childers, J. (2011). Comparing sexual assault prevalence estimates obtained with direct and indirect questioning techniques. *Violent Against Women*, 17(2), pp. 219-235.

Kruttschnitt, C. and Macmillan, R. (2006). The violent victimization of women: A lifecourse perspective. In Heimer, K., and Kruttschnitt, C. (eds), *Gender and Crime: Patterns in Victimization and Offending*, New York University Press, New York, pp. 139-170.

LaBrie, J. W., & Earleywine, M. (2000). Sexual risk behaviors and alcohol: Higher base rates revealed using the unmatched count technique. *Journal of Sex Research*, 37, 321-326.

Land, K., McCall, P., & Cohen, L. (1990). Structural covariates of homicide rates: Are there any invariances across time and space?" *American Journal of Sociology*, 95, pp.922-63.

Lesserman, J., Li, Z., Drossman, D. A., Toomey, T. C., Nachman, G., & Glogau, L. (1997). Impact of sexual and abuse measure. *Psychosomatic Medicine*, 59, 152-160.

Lauritsen, J.L. (2001). The social ecology of violent victimization: Individual and contextual effects in the NCVS. *Journal of Quantitative Criminology*, 17, pp. 3-32.

Lauritsen,J.L. (2012). *Subpopulations at High Risk for Rape and Sexual Assault: What Does the NCVS Tell Us?* Report prepared for the Panel on Measuring Rape and Sexual Assault in Bureau of Justice Statistics Surveys, Committee on National Statistics, Washington, DC: June 5, 2012.

Lauritsen, J.L. and Heimer, K. (2009). *Gender and Violent Victimization, 1973-2005*. Washington, D.C.: U.S. Department of Justice.

Lauritsen, J.L. and Rennison, C. (2006). The role of race and ethnicity in violence against women. In Heimer, K., and Kruttschnitt, C. (eds), *Gender and Crime: Patterns in Victimization and Offending*, New York University Press, New York, pp.303-322.

Lauritsen, J.L. and Schaum, R.J. (2004). The social ecology of violence against women. *Criminology* 42: 323-357.

Lauritsen, J.L. and White, N. (2001). Putting violence in its place: the influence of race, ethnicity, gender, and place on the risk for violence. *Criminology & Public Policy*, 1, pp. 37-60.

Layman, M. J., Gidycz, C. A., & Lynn, S. J. (1996). Unacknowledged versus acknowledged rape victims: Situational factors and posttraumatic stress. *Journal of Abnormal Psychology*, 105, 124-131.

Logan, T. K., Walker, R., Jordan, C. E., & Leukefeld, C. G. (2006). Lifestyle Factors. In *Women and victimization: Contributing factors, interventions, and implications*. , (pp. 51-64). Washington, DC, US: American Psychological Association, xii, 321 pp. doi: 10.1037/11364-003

MacKinnon, C. (2013). Intersectionality as method: A note. *Signs*, 38 (4), pp. 1019-1030.

Marchi, K. S., & Guendelman, S. (1995). Gender differences in the sexual behavior of Latino adolescents: An exploratory study in a public high school in the San Francisco Bay Area. *International Quarterly of Community Health Education*, 15, pp. 209-26.

Marin, B., Tschann, J., Gomez, C., & Kegeles, S. (1993). Acculturation and gender differences in sexual attitudes and behaviors: Hispanic vs. non-Hispanic White unmarried adults. *American Journal of Public Health*, 83, pp. 1759-1761.

Marshall, L. L. (1992). Development of the Severity of Violence Against Women Scales. *Journal of Family Violence*, 7, 103-121.

Marshall S. (1990). Equity issues and black-white differences in women's ERA support. Social Science Quarterly, 71(2), pp. 299-314.

Martinez, R. Jr. (1997). Homicide among the 1980 Mariel refugees in Miami: Victims and offenders. *Hispanic Journal of Behavioral Sciences*, 19, 107-22.

Martinez, R. Jr. (2003). Moving beyonf black and white violence: African American, Haitian, and Latino homicides in Miami. In Hawkins, D. (ed.) *Violent Crime: Assessing Race and Ethnic Differences*. Cambridge University Press.

McCabe, S. E., Boyd, C. J., Couper, M. P., Crawford, S., & D'Arcy, H. (2002). Mode effects for collecting alcohol and other drug use data: Web and U.S. mail. *Journal of Studies on Alcohol*, 63, 755-61.

McCabe, S. E. (2004). Comparison of web and mail surveys in collecting illicit drug use data: A randomized experiment. *Journal of Drug Education*, 34, 61-72.

Meier, R. and Miethe, T. (1993). Understanding theories of criminal victimization. In M. Tonry (ed.), *Crime and Justice: A Review of Research*. Vol. 17. Chicago: University of Chicago Press.

Merton, R. (1938). Social structure and anomie. *American Sociological Review*, 3, pp. 672-782.

Miethe, T., McDowall, D. (1993). Contextual effects in models of criminal victimization. *Social Forces*, 71, 741-59.

Miller, J. (2008). *Getting Played*. New York University Press.

Milner, R., Webster, S. (2005). Identifying schemas in child molesters, rapists and violent offenders. *Sexual Abuse: A Journal of Research and Treatment*, *17-4, 425-439.*

Min, P. (1998). *Changes and Conflicts*. Boston: Allyn & Bacon.

Naus, M. J., Phillip, L. M., & Samsi, M. (2009). From paper to pixels: A comparison of paper and computer formats in psychological assessment. *Computers in Human Behavior*, 25, 1-7.

National Research Council. (2014). *Estimating the Incidence of Rape and Sexual Assault. Panel on Measuring Rape and Sexual Assault in Bureau of Justice Statistics Household Surveys*, C. Kruttschnitt, W.D. Kalsbeek, and C.C. House, Editors. Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

Ongena, Y. P., & Dijkstra, W. (2007). A model of cognitive processes and conversational principles in survey interview interaction. *Applied Cognitive Psychology*, 21, 145-163.

Oliver, W. (1994). *The Violent Social World of Black Men*. New York: Lexington Books.

Oropesa, R. and Landale, N. (2004). The future of marriage and Hispanics. *Journal of Marriage and Family*, 66(4), pp. 901-20.

Padilla, A. M., & Baird, T. L. (1991). Mexican-American adolescent sexuality and sexual knowledge: An exploratory study. *Hispanic Journal of Behavioral Sciences*, 13, pp. 95-104.

Pavich, E. (1986). A Chicana perspective on Mexican culture and sexuality. *Journal of Social Work and Human Sexuality*, 4, pp. 47-65.

Perry, S.W. (2004, December). *American Indians and crime. A BJS statistical profile, 1992-2002.* (NCJ 203097). Washington, DC: Bureau of Justice Statistics.

Peterson, R. and Krivo, L. (2005). Macrostructural analyses of race, ethnicity, and violent crime: Recent lessons and new directions for research. *Annual Review of Sociology*, 31, pp.331-56.

Petty, G. M., & Dawson, B. (1989). Sexual aggression in normal men: Incidence, beliefs, and personality characteristics. *Personality and Individual Differences*, 10, 355-362.

Polaschek, L., Gannon, T. (2004). The implicit theories of rapists: What convicted offenders tell us. *Sexual Abuse: A Journal of Research and Treatment*, *16-4, 299-314*.

Poussaint, A. (1972). *Why Blacks Kill Blacks*. New York: Emerson Hall.

Pyke, K. and Johnson, D. (2003). Asian American women and racialized femininities: "Doing" gender across cultural worlds. *Gender and Society*, 17(1), pp. 33-53.

Rand, M. and Rennison, C. (2005). Bigger is not necessarily better: An analysis of violence against women estimates from the National Crime Victimization Survey and the National Violence Against Women Survey. *Journal of Quantitative Criminology* 21: 267-291.

Rapaport, K., & Burkhart, B. R. (1984). Personality and attitudinal characteristics of sexually coercive males. *Journal of Abnormal Psychology*, 93, 216-221.

Rennison, C. (2002). Hispanic Victims of Violent Crime, 1993-2002. Washington, D.C.: Bureau of Justice Statistics.

Resnick, H.S., Kilpatrick, D.G., Dansky, B.S., Saunders, B.E., & Best, C.L. (1993). Prevalence of civilian trauma and PTSD in a representative sample of women. *Journal of Consulting and Clinical Psychology*, 61, 984-991.

Rice T., Coates, D. (1995). Gender role attitudes in the southern United States. *Gender and Society*, 9(6), pp. 744-56.

Rodenburg, F., A., & Fantuzzo, J. W. (1993). The measure of wife abuse: Steps toward the development of a comprehensive assessment technique. *Journal of Family Violence*, 8, 203-228.

Sampson, R. (1987). Urban black violence: The effect of male joblessness and family disruption. *American Journal of Sociology* 93 (2), pp. 348-82.

Sampson, R. and Groves, W. (1989). Community structure and crime: Testing social disorganization theory. *American Journal of Sociology*, 94, pp. 774-802.

Sampson, R. and Lauritsen, J.L. (1994). Violent victimization and offending: Individual-, situational- and community-level factors. In *Understanding and Preventing Violence, Vol. 3, Social Influences*. Washington DC: National Academy Press.

Sampson, R. and Lauritsen, J.L. (1997). Racial and ethnic disparities in crime and criminal justice in the United States. *Crime and Justice,* 21, pp. 311-374.

Sampson, R. and Wilson, W. (1995). Toward a theory of race, crime, and urban inequality. In *Crime and Inequality*, ed. J. Hagan, R. Peterson, pp. 37-54. Stanford, CA: Stanford University Press.

Sanday, P. (1996). *A Woman Scorned: Acquaintance Rape on Trial*. University of California Press.

Schafran, L. and Weinberger, J. (2010). New U.S. crime reports: Flawed methodology sharply underestimates rape rates against women and persons with disabilities. *Sexual Assault Report.* Civic Research Institute.

Shackelford, T. K., & Goetz, A. T. (2004). Men's sexual coercion in intimate relationships: Development and initial validation of the sexual coercion in intimate relationships scale. *Violence and Victims*, 19, 541-556.

Schwarz, N. (2007). Cognitive aspects of survey methodology. *Applied Cognitive Psychology*, 21, 277-287.

Sellin, T. (1938). *Culture, Conflict, and Crime*. New York: Social Science Research Council.

Shaw, C. and Mckay, H. (1942). *Juvenile Delinquency and Urban Areas*. Chicago: Univ. Chicago Press.

Skogan, W. (1981). Reactions to crime: Impacts of crime: On attitudes and behaviors. Sage *Criminal Justice System Annuals*, 16, 19-45.

South, S. and Messner, S. (2000). Crime and demography: multiple linkages, reciprocal relations. *Annual Review of Sociology*, 26, pp. 83-106.

Spade, J. Z. (1989). Bringing home the bacon: A sex-integrated approach to the impact of work on the family. In Gender in intimate relationships: A microstructural approach, edited by B. J. Risman and P. Schwartz. Belmont, CA: Wadsworth.

Sparks, R.F. (1982). *Research on victims of crime*. Washington, DC: Government Printing Office.

Staples, R. (1986). The masculine way of violence. In *Homicide among Black Americans*, ed. D. Hawkins, 137-53. New York: University Press of America.

Stark, E. (2003). Race, gender and woman battering. In Hawkins, D. (ed.) *Violent Crime: Assessing Race and Ethnic Differences*, pp. 171-97. Cambridge University Press.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17, 283-316.

Sullivan, M. (1989). *Getting Paid: Youth Crime and Work in the Inner City*. Ithaca, N.Y.: Cornell University Press.

Sutherland, E. (1934). *Principles of Criminology*. Chicago: Lippincott.

Short Jr., J. (2003). Foreword. In *Violent Crime: Assessing Race and Ethnic Differences.* Hawkins, D. (ed.). Cambridge University Press.

Taylor, R. (1979). Black ethnicity and the persistence of ethnogenesis. *American Journal of Sociology*, 84, pp. 1401-23.

Testa, M., VanZile-Tamsen, C., Livingston, J. A., & Koss, M. P. (2004). Assessing women's experiences of sexual aggression using the Sexual Experiences Survey: Evidence for validity and implications for research. *Psychology of Women Quarterly*, 29, 345-352.

Tittle, C. R. (1995). Control balance theory. Criminological Theory, 563-565.

Tjaden, P., and Thoennes, N. (2000). *Full Report of the Prevalence, Incidence, and Consequences of Violence Against Women: Findings from the National Violence Against Women Survey*. (NCJ #183781.) Washington, DC: U.S. Department of Justice, National Institute of Justice.

Tjaden, P. and Thoennes, N. (2006). *Extent, Nature and Consequences of Rape Victimization: Findings from the National Violence Against Women Survey*. Washington, D.C.: Office of Justice Programs, U.S. Department of Justice.

Tourangeau, R., and Yan, T. (2007). Sensitive questions in surveys. *Psychological Bulletin*, 133(5), 859-883.

Tourangeau, R., Rips, L., and Rasinski, K. (2000). *The Psychology of Survey Response*. Cambridge, UK: Cambridge University Press.

Tracy, C., Fromson, T., Long, J., and Whitman, C. (2012). *Rape and Sexual Assault in the Legal System*. Paper commissioned by the National Research Council Panel on Measuring Rape and Sexual Assault in the Bureau of Justice Statistics Household Surveys. Available: http://sites.nationalacademies.org/DBASSE/CNSTAT/CurrentProjects/DBASSE_073316 [April 2014]

Turchik, J. A., Probst, D. R., Irvin, C. R., Chau, M. & Gidycz, C. A. (2009). Prediction of sexual assault experiences in college women based on rape scripts: A prospective analysis. *Journal of Consulting and Clinical Psychology*, 77, 361-366.

Upchurch, D., Levy-Storms, L., Sucoff, C., & Aneshensel, C. (1998). Gender and ethnic differ- ences in the timing of first sexual intercourse. *Family Planning Perspectives*, 30, pp. 121-27.

Upchurch, D. et al. (2001). Sociocultural contexts of time to first sex among Hispanic adolescents. *Journal of Marriage and Family*, 63 (4), pp. 1158-1169.

Uriell, Z. A., & Dudley, C. M. (2009). Sensitive topics: Are there modal differences? *Computers in Human Behavior*, 25, 76-87.

Wallace, L., Calhoun, A., Powell, K., O'Neil, J., and James, S. (1996). *Homicide and Suicide among Native Americans, 1979-1992, Violence Surveillance Summary Series, No. 2.* Atlanta: U.S. Department of Health and Human Services, National Center for Injury Prevention and Control.

Ward, T., Louden, K., Hudson, S. M., & Marshall, W. L. (1995). A descriptive model of the offense chain for child molesters. *Journal of Interpersonal Violence*, *10,* 452–472.

Waters, M. and Eschbach, K. (1995). Immigration and ethnic and racial inequality in the United States. Annual Review of Sociology, 21, pp. 419-46.

Whaley, R. (2001). The paradoxical relationship between gender inequality and rape: Toward a refined theory. *Gender & Society*, 15 (4), 531 -555.

Wilkie J. (1993). Changes in U.S. men's attitudes toward the family provider role, 1972-1989. *Gender and Society*, 7(2), pp. 261-79.

Wilson, W. (1987). *The Declining Significance of Race*. Chicago: University of Chicago Press.

Wilson, W. J., Aponte, R., Kirschenman,J.,& Wacquant, L.(1988). *The Ghetto Underclass and the Changing Structure of American Poverty*. In Quiet Riots: Race and Poverty in the United States, edited by F. Harris and R. W. Wilkins. New York: Pantheon.

Wolfgang, M. and Ferracuti, F. (1967). *The Subculture of Violence: Towards an Integrated Theory in Criminology*. London: Tavistock Publications.

Xie, M,., Heimer, K., & Lauritsen. J. (2012). Violence against women in U.S. metropolitan areas: changes in women's status and risk, 1980-2004. Criminology, 50 (1), pp. 105 – 143.

Yu, Q., Stasny, E., and Lin, B. (2008). Bayesian models to adjust for response bias in survey data for estimating rape and domestic violence rates from the NCVS. *The Annals of Applied Statistics*, 2(2), 665-686.

APPENDIX: MULTIVARIATE SURVEY-WEIGHTED REGRESSIONS OF SUBTYPES OF RAPE AND SEXUAL ASSAULT

Multivariate Full Model Survey-Weighted Regression of Completed Rape and Sexual Assault (n=1,814,067).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-.1.0	.17	***
Hispanic (vs. Black)	-.67	.20	**
Black (vs. White)	-.35	.12	**
Age	-.06	.00	***
Poor	.73	.09	***
Suburban	.01	.15	
Urban	.37	.15	*
Never married	.95	.15	***
Divorced/Separated/Widowed	1.9	.14	***
Violent Victimization	2.1	.12	***

*p<.05; **p<.01; ***p<.001. "Other" category was also included in the model but is omitted here.

Multivariate Full Model Survey-Weighted Regression of Repeat Rape and Sexual Assault Victimization (n=1,814,067).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-.86	.48	
Hispanic (vs. Black)	-1.2	.52	*
Black (vs. White)	.30	.31	
Age	-.06	.01	***
Poor	.26	.28	
Suburban	-.46	.33	
Urban	-.24	.33	
Never married	.98	.44	*
Divorced/Separated/Widowed	2.4	.44	***
Violent Victimization	2.2	.37	***

*p<.05; **p<.01; ***p<.001. "Other" category was also included in the model but is omitted here.

Multivariate Full Model Survey-Weighted Regression of Series Rape and Sexual Assault Victimization (n=1,814,067).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-.79	.44	
Hispanic (vs. Black)	-.20	.54	
Black (vs. White)	-.59	.38	
Age	-.07	.01	***
Poor	.36	.24	
Suburban	-.22	.26	
Urban	-.28	.31	
Never married	.50	.42	
Divorced/Separated/Widowed	1.7	.36	***
Violent Victimization	3.1	.26	***

*p<.05; **p<.01; ***p<.001. "Other" category was also included in the model but is omitted here.

Multivariate Full Model Survey-Weighted Regression of Rape and Sexual Assault with Injury (n=1,814,067).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-1.0	.19	***
Hispanic (vs. Black)	-.69	.20	**
Black (vs. White)	-.33	.13	*
Age	-.06	.00	***
Poor	.97	.10	***
Suburban	.14	.15	
Urban	.48	.16	**
Never married	.92	.16	***
Divorced/Separated/Widowed	2.3	.11	***
Violent Victimization	2.3	.11	***

$*p<.05$; $**p<.01$; $***p<.001$. "Other" category was also included in the model but is omitted here.

Multivariate Full Model Survey-Weighted Regression of Rape and Sexual Assault with Serious Injury (n=1,814,067).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-.96	.27	**
Hispanic (vs. Black)	-.69	.30	*
Black (vs. White)	-.27	.22	
Age	-.06	.00	***
Poor	1.1	.17	***
Suburban	.23	.25	
Urban	.67	.25	**
Never married	.90	.26	***
Divorced/Separated/Widowed	2.0	.26	***
Violent Victimization	2.4	.19	***

*p<.05; **p<.01; ***p<.001. "Other" category was also included in the model but is omitted here.

Multivariate Full Model Survey-Weighted Regression of Rape and Sexual Assault with a Weapon (n=1,814,067).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-.41	.30	
Hispanic (vs. Black)	-.40	.34	
Black (vs. White)	-.01	.27	
Age	-.04	.01	***
Poor	.85	.21	***
Suburban	.02	.28	
Urban	.26	.28	
Never married	.85	.32	**
Divorced/Separated/Widowed	1.8	.28	***
Violent Victimization	3.6	.21	***

*p<.05; **p<.01; ***p<.001. "Other" category was also included in the model but is omitted here.

Multivariate Full Model Survey-Weighted Regression of Stranger Rape and Sexual Assault (n=1,814,067).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-.75	.24	**
Hispanic (vs. Black)	-.02	.33	
Black (vs. White)	-.72	.25	**
Age	-.05	.01	***
Poor	.77	.16	***
Suburban	.71	.28	*
Urban	1.3	.28	***
Never married	.60	.24	*
Divorced/Separated/Widowed	1.4	.23	***
Violent Victimization	2.1	.21	***

*p<.05; **p<.01; ***p<.001. "Other" category was also included in the model but is omitted here.

Multivariate Full Model Survey-Weighted Regression of Rape and Sexual Assault by Known Offender (n=1,814,067).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-.98	.19	***
Hispanic (vs. Black)	-.50	.22	*
Black (vs. White)	-.48	.14	**
Age	-.06	.01	***
Poor	.66	.12	***
Suburban	.12	.17	
Urban	.54	.17	**
Never married	1.1	.20	***
Divorced/Separated/Widowed	1.8	.21	***
Violent Victimization	2.2	.13	***

*p<.05; **p<.01; ***p<.001. "Other" category was also included in the model but is omitted here.

Multivariate Full Model Survey-Weighted Regression of Rape and Sexual Assault by Intimate Partner (n=1,814,067).

Predictor Variable	Coef	SE	Sig
Hispanic (vs. White)	-.1.3	.26	***
Hispanic (vs. Black)	-.91	.30	**
Black (vs. White)	-.35	.22	
Age	-.05	.01	***
Poor	.77	.17	***
Suburban	-.09	.22	
Urban	.02	.23	
Never married	.85	.26	**
Divorced/Separated/Widowed	2.3	.24	***
Violent Victimization	3.1	.16	***

*p<.05; **p<.01; ***p<.001. "Other" category was also included in the model but is omitted here.