

**THE COLONIAL SUBJECTS: INTERSECTIONS OF RACE AND ETHNICITY
IN YOUTH VIOLENCE**

by

Lorena M. Estrada Martínez

A dissertation submitted in partial fulfillment
of the requirements of the degree of
Doctor of Philosophy
(Health Behavior and Health Education)
in the University of Michigan
2009

Doctoral Committee:

Associate Professor Cleopatra Howard Caldwell, Co-Chair
Associate Professor Amy Jo Schulz, Co-Chair
Professor Ana V. Diez Roux
Professor Silvia Pedraza
Assistant Professor Mark B. Padilla

© Lorena M. Estrada Martínez

2009

A mis abuelas

ACKNOWLEDGEMENTS

I owe a huge debt of gratitude to quite a few people whose love and support have brought me to this point. First, I would like to thank my committee members. To my co-chair and adviser Cleo Caldwell. Words cannot express how incredibly fortunate I am to have had you as a guide all these years, from my first semester in your adolescent health course to the finishing touches of this dissertation. You have pushed me to do my best, bringing me to a new level. You have gone above and beyond the call of duty, becoming an amazing friend and mentor (yes, even my non-HBHE friends are jealous!!!). None of this would have been possible without you. To my co-chair and mentor Amy Schulz. You brought an undergraduate SROP intern from the University of Puerto Rico and introduced her to the world of public health. Thank you for taking a chance on me, and seeing the process through. Your contributions to my academic formation and intellectual productivity are incalculable.

To Silvia Pedraza for her incredible example as a Latina scholar, whose work has helped shape our understanding of Latino immigrants in the United States. Thank you for the courses you taught me, our conversations on Cubans and Puerto Ricans in the U.S., and your involvement in this dissertation. To Ana Diez Roux, for agreeing to be a part of this project and providing such excellent methodological guidance throughout. Last, but not least, to Mark Padilla who agreed to take a chance and be a part of this committee as soon as I asked... an incredible act of faith. Your

contributions have helped broaden my understanding of Latino health and interdisciplinary work. I look forward to many more discussions in the upcoming years.

I must also acknowledge several people that have been instrumental to my development as a researcher and scholar, and to this project. I am eternally grateful to Graciela Mentz, Lingling Zhang, and the CSCAR team for their incredible support and patience in teaching me the ins and outs of statistics. To José Bauermeister, friend, colleague, and teacher. You are the best. Thank you a million times for being there the last seven years. To Arline Geronimus, Woody Neighbors, Barbara Israel, Gilbert Gee, Lisa Kane Low, Marcia Inhorn, Marc Zimmerman, Jayati Lal, Bill Axinn, Antonia Villarruel, Mary Clark, and Ken Warner. Thank you all for allowing me to learn from you inside and outside the classroom.

My life has been blessed for having made such amazing friends during my time at Michigan. Thank you all for keeping me warm, body and soul, during many harsh winters. To Mike, Lloyd, Mark, Chela, Linda, Jason R., Brian, and Roberto, thank you all for the long talks, the nights of food, wine, and laughter, and the support through it all. To my intellectual brothers and sisters in HBHE, CRECH, Epidemiology, Sociology, and Women's Studies, especially Kilolo, Jay, Melissa, Danya, Rahwa, Shipra, Lisa M., Lisa L., Ebony, Darrell, Tenaya, Denise, Kenyetta, Rashid, Ana, and Emily. You made it so much easier to get up early, in the middle of a snowstorm, go to class, and learn about topics I love. It made all the difference in the world to have incredible minds to share this ride with, always pushing each other towards excellence and a new understanding of the social determinants of health. To all my salsa dancing friends. I hope to keep dancing with you all in the years to come!!

Nada de esto sería posible sin mi familia. A mi mamá Loida y mi papá Kike. Son mis motores, mi inspiración, el apoyo más constante de mi vida. Gracias por todo el amor, absurdamente incondicional, que siempre me han tenido, independientemente de lo que haya caído al frente. Gracias por enseñarme a “meterle caña” al asunto y mantener una dirección clara en la vida, no importa si estoy en medio de tormentas o mares tranquilos. Ya ven, no salió tan mal la cosa. Los amo más de lo que estas páginas pueden aguantar.

A Rosi, que es el centro y balance de esta familia compuesta, gracias por todos los consejos y direcciones a lo largo de la vida. No sería quien soy sin ti. A Ron, por todo el apoyo durante estos años y enseñarme que los detalles también son importantes.

Gracias a mis hermanos, Yinán, Kacho, Chago, Mario y Benjamín. A mi sobrina Cecilia; mis abuelas Marta (Q.E.P.D.), Carmen y Paquita; a mis tías Carmen Lydia, Carmen, Marta y Vilma; a mis primas Namibia, Azania y Argelia; y a mi gran familia extendida. Ustedes son el ejemplo más perfecto de lo que es el familismo en todas sus dimensiones.

A mis amigos en Puerto Rico, que me mantienen cerca de mi tierra en corazón y espíritu, no importa cuán lejos me lleven los vientos; en especial a Jessica, Lin, Marie Carmen, Airdalerys, Gladymar, Juan y Jorge. A mi familia boricua en Ann Arbor: Juan, Luis, Zorimar, Vivian, Mara, Laura, Alexis y Beatriz. Me llenaron la mente y el alma. Gracias por las noches de vino y ron, por las conversaciones, los llantos, las risas y hasta las peleas. Me han hecho quien soy y no los cambiaría por nada. Gracias a la vida por habernos dado estos años hermosos.

TABLE OF CONTENTS

DEDICATION.....	ii
ACKNOWLEDGEMENTS.....	iii
LIST OF TABLES.....	vii
LIST OF FIGURES.....	ix
ABSTRACT.....	x
CHAPTERS	
1. INTRODUCTION.....	1
2. EXAMINING THE ROLE OF ETHNICITY IN YOUTH VIOLENCE AMONG LATINOS: A CRITICAL REVIEW.....	19
3. UNPACKING THE INFLUENCE OF FAMILY CONTEXT ON YOUTH VIOLENCE ACROSS RACE/ETHNICITY: AN ANALYSIS OF LATINOS, BLACKS, AND WHITES.....	96
4. UNPACKING NEIGHBORHOOD ECONOMIC STATUS AND RACIAL/ETHNIC COMPOSITION IN THE RISK OF YOUTH VIOLENCE: A MULTILEVEL ANALYSIS OF LATINO, BLACK, AND WHITE YOUTH.....	145
5. CONCLUSION.....	210

LIST OF TABLES

Table

2.1. National Estimates of Serious Violent Behavior by Race.....	27
2.2. Family Household Characteristics by Race, Ethnicity, and Generation, Pooled 1998-2002.....	70
2.3. Living Arrangements by Age Interval and Ethnicity, Pooled 1998-2002.....	71
2.4. Median Real Annual Income and Per Capita Income of Households in 2002 Dollars, Pooled 1997-2002.....	73
3.1. Descriptive Statistics of Control Variables, Full Sample, and by Racial/Ethnic Group.....	110
3.2. Distribution of Violence Scores and Key Independent Variables for the Full Sample, by Racial/Ethnic Group.....	119
3.3. Odds Ratios for Risk for Violent Behaviors.....	121
3.4. Odds Ratios for Risk for Violent Behaviors among White Youth.....	124
3.5. Odds Ratios for Risk for Violent Behaviors among Cuban Youth.....	125
3.6. Odds Ratios for Risk for Violent Behaviors among Mexican Youth.....	126
3.7. Odds Ratios for Risk for Violent Behaviors among Puerto Rican Youth.....	127
3.8. Odds Ratios for Risk for Violent Behaviors among Black Youth.....	128
4.1. Sample Description, Full Sample, and by Racial/Ethnic Group.....	161

4.2. Distribution and Risk for Violence Behaviors, Full Sample, and by Racial/Ethnic Group.....	173
4.3. Descriptive Statistics of Adolescent Respondents’ Neighborhood of Residence, Full Sample, and by Racial/Ethnic Group.....	174
4.4. Descriptive Statistics of Adolescent Respondents’ Neighborhoods, by Primary Racial/Ethnic Composition.....	177
4.5. Descriptive Statistics of Adolescent Respondents’ Neighborhoods, by Neighborhood Socioeconomic Status Quartiles.....	180
4.6. Percent Distribution of Neighborhood Socioeconomic Status Quartiles, by Racial/Ethnic Composition.....	181
4.7. Percent Distribution of Adolescent Respondents’ by, Neighborhood Socioeconomic Status Quartiles.....	181
4.8. Population Average Odds Ratios for the Risk for Violent Behaviors.....	183
4.9. Population Average Odds Ratios of the Risk for Violent Behavior by Racial/Ethnic Composition of the Neighborhoods.....	189
4.10. Population Average Odds Ratios for Risk for Violent Behaviors, by Racial/Ethnic Group.....	190

LIST OF FIGURES

Figure

2.1. Ethnic Inequalities in Youth Violent Behaviors: An Exploration of Latino Youths.....	75
4.1. Distribution of Neighborhood Socioeconomic Status by Racial/Ethnic Composition.....	178
4.2. Mean Probability of Violent Behaviors by Neighborhood Socioeconomic Status and Racial/Ethnic Composition.....	186

ABSTRACT

Research has long established differences in youth violence by race and gender, with Latino and African American males exhibiting higher rates than other groups of youth (CDC, 2006). The evidence examining violence among Latino youth is limited by the homogenization of all groups under a pan-ethnic label. Recent evidence by Sampson, Morenoff, and Raudenbush (2005) and Martínez (2003) suggests that important differences in violence may exist within the Latino population by ethnicity that may be due, in part, to experiencing different social environmental conditions. The overall goal of this dissertation is to unpack the roles of race/ethnicity in youth violence perpetration by examining structural *and* cultural elements that may play a role. In particular I: (a) summarize and critique frequently used family and neighborhood theories on youth violence, while proposing a conceptual model for the examination of violence among Latino youth; (b) describe the prevalence and risk for violent behaviors across race/ethnicity, and the distribution of risk and protective factors for violence in a nationally representative sample of Mexican/Mexican American, Cuban/Cuban American, Puerto Rican, Black, and White adolescents; (c) examine whether *familism*, an important cultural value among Latinos, is protective against youth violence, and how it operates across racial/ethnic subgroups, after adjusting for age, sex, family economic resources, and immigrant generation; and (d) assess the main and interactive effects of neighborhood socioeconomic status and neighborhood racial/ethnic composition on youth violence, after adjusting for age, sex, mother's education, demographic *familism*, neighborhood residential stability, and immigrant concentration. Implications of findings for interventions and policy are also discussed.

CHAPTER 1

INTRODUCTION

Violence among America's youth has been a major concern in social science research since the latter half of the 20th century. As the second leading cause of death among 10 to 24 year olds, youth violence is highly visible and one of the main contributors to global morbidity (Dahlberg & Krug, 2002; Mercy et al. 2002). Decades of research have consistently found an overrepresentation of youth of color in violent behavior statistics (Shaw & McKay, 1942). Furthermore, studies have found a consistent spatial clustering of these incidents within specific geographically defined communities (Sampson & Morenoff, 1997). Macrostructural factors, such as policies that created residential segregation, have resulted in Whites and people of color living in vastly different family and community environments, marked by an overrepresentation of the latter living in poverty (Massey, Gross, & Shibuya, 1994; Massey, 1990).

The economic well-being of many youth of color in the United States is further undermined by poor educational and employment opportunities that are geographically bound, limiting upward mobility, opportunities for marriage, and social interactions with mainstream society (Reimers, 2006; Guerra & Williams, 2006). Thus, it is within family and community spaces that we may see how socioeconomic and political histories contribute to differential outcomes in violent behaviors among ethnically diverse adolescents.

In the national report *Healthy People 2010*¹ the federal government explicitly addressed health disparities as an important public health problem and stressed the importance of reducing inequalities in violence, specifically homicides, assaults, physical fighting, and weapon carrying among adolescents. Arguing that prevention efforts must address poverty, discrimination, and access to education and employment opportunities, this blueprint of public health goals marks a rhetorical shift in official discourse towards a more holistic view of violence (U.S. Department of Health & Human Services [DHHS], 2000). However, this shift did not occur within a vacuum. After the Civil Rights movement and the retraction of major social welfare policies during the 1980s, a considerable amount of research identified factors beyond the individual that explained the distribution of violence across different sociodemographic groups. In fact, some qualified the sociopolitical status of minorities in the United States as internal colonies, highlighting the historical paths of each group and the their persistent economic and spatial isolation (Blauner, 1969).

The recognition of the important role of structural factors precipitated a new era of neighborhood-centered research in crime and violence. In a review of the neighborhood-effects literature, Sampson, Morenoff, and Gannon-Rowley (2002) conclusively found that the strongest evidence for neighborhood-effects was in the development and distribution of crime and violence. These findings highlighting the importance of macro-structural factors in the onset of violence over which individual actors have little control. Hofrichter (2003) characterized health inequities more generally as those that are systemic and unjust, resulting from a lack of political power.

¹ Healthy People 2010 is the national health promotion initiative that sets out the public health agenda for the 2000-2010 decade.

He reminds us that health inequities are generated by laws and institutional policies (both public and corporate) that have in many instances used violence in order to perpetuate great inequalities in wealth and power. Although numerous studies have examined determinants of disparities in violence outcomes since Shaw and McKay's (1942) early work on violence outcomes in Chicago, the last decade has been particularly marked by a serious debate about inequality and the principle of social justice in this line of research (Bellair, Roscigno, & McNulty, 2003; Bruce & Roscigno, 2003; Dahlberg & Krug, 2002; Wilkinson, Kawachi, & Kennedy, 1999).

There have been two important limitations in youth violence research. First, secondary data sources that relate to criminal offenses are too often used to characterize youth violence. These sources are usually gathered and analyzed by government agencies (e.g., Department of Justice, Federal Bureau of Investigation, and regional juvenile justice systems), and have been critiqued for their underestimation of violent incidents and their overestimation of racial disparities in violent acts due to over- and under-policing in neighborhoods of different racial/ethnic compositions. Other sources include hospital and/or medical clinics, but these studies only capture violent incidents that result in an injury serious enough to require medical attention. In both cases, records only include the most severe types of violence victimization, such as homicide and aggravated assault (Williams, MacMaster, & Ellis, 2002); thus, they do not account for the vast majority of incidents of youth violence. Furthermore, this conceptualization of youth violence feeds into racialized and gendered images where Black and Latino males are viewed as dangerous dark strangers responsible for spreading violence throughout communities, inducing fear among the population by suggesting that

violence is everywhere and that anyone is equally likely to be a victim. The public perception fomented by the disproportionate policing of these groups and the general feel that ensues has led to greater demands for punitive measures, including the prosecution of minors as adults (Williams et al., 2002). However, evidence suggests that minorities, especially Black and Latino youth, are significantly more likely to be *both perpetrators and victims* of violence (CDC, 2006), making them especially vulnerable populations.

Second, compared to violent victimization, fewer researchers have investigated the role of violent behaviors among youth, or how these behaviors are distributed across racially *and* ethnically diverse populations. This is a serious shortcoming that limits the development and implementation of policies and intervention strategies that may ultimately reduce youth violence among the most vulnerable populations. This dissertation examines racial² and ethnic³ differences in physical violence behaviors, with a particular focus on Latino youth. Building on the hypotheses that persistent differences in youth violence stem from variations in family and community environments, the relationship of family beliefs and functioning and neighborhood characteristics (e.g., residential segregation and neighborhood economic well-being) on youth violence are also examined. Although not explicitly measured in

² The concepts of race and ethnicity among Latinos in the United States are subject to the US census categories. Latinos are descendants of various admixtures of European, African, indigenous, and to a lesser extent Asian ancestries (Mays, Ponce, Washington, & Cochran, 2003; Rodriguez, 2000) and primarily identify with their country of origin. The pan-ethnic identity of Hispanic/Latino is one forged in the United States mainland.

³ Although there is a considerable population of Latinos from throughout the continent, this dissertation focuses on Mexicans, Puerto Ricans, and Cubans, the three largest and oldest groups in the country. Adolescents of other ethnicities are not included in large enough numbers in Add Health to carry out separate analysis. An integral part of my argument is that Latinos are not all alike given their different histories within the United States and countries of origin, thus it would be inappropriate to include a heterogeneous category of Latinos within my analysis. Wherever current literature permits it, I specify ethnic groups.

this dissertation, a basic assumption is the existence of fundamental factors that affect health outcomes through multiple mechanisms (Link & Phelan, 2000). These are understood as stemming from larger social norms and policies that ultimately shape each group's historical experience with immigration, racialization, and assimilation into mainstream American society.

Examining Youth Violence Inequalities among Latinos

Latinos are the largest ethnic minority group in the United States and are projected to constitute well over 25% of the population by 2050 (Rumbaut, 2006). Originally confined to a small number of states, the population has begun a rapid movement into all states (Durand, Telles, & Flashman, 2006). Approximately 20% of all youths in the country are Latinos, yet they remain an understudied and underserved population (Smith & Guerra, 2006). The rapid population growth, particularly among Latinos, signals that the health of the nation will be tied to their health. However, health inequalities research is too often limited by a dichotomous view of race (i.e., Black v. White) and homogenization of Latinos into a single category.

Traditionally, policy and research on health inequalities in the United States has focused on understanding White-Black differences. After the Civil Rights Movement the lives and social conditions of African Americans were examined with greater emphasis, yet work on Latinos and other people of color lagged considerably behind. Historically, African Americans had been the largest ethnic minority group in the country. However, their experiences are not necessarily representative of all people of color in the United States (including other Black ethnic groups, such as African or

Afro-Caribbean immigrants). Thus, the White-Black paradigm does not recognize the unique origins, history, and processes in this country of other ethnic groups (Delgado & Stefancic, 2001). Further, current estimates of the size and growth of the Latino population highlight the need to understand the dynamics that affect them. The labels Hispanic and/or Latino include peoples from 21 countries. In the United States, these populations differ widely in socioeconomic position, immigration experiences, racial and ethnic identity (both self-reported and imposed by others), and geographic concentration, to name a few (Rumbaut, 2006; Landale, Oropesa, & Bradatan, 2006; Reimers, 2006). The default use of the pan-ethnic label obscures important differences in outcomes and in their experiences and environments that are shaped by specific processes in their countries of origin and in the United States.

Theoretical Framework

Identifying cultural and structural factors associated with committing violent acts can lead to interventions and policies beyond the individual level that address broader environmental changes necessary to protect against or reduce such acts from a population perspective. The vast literature on youth's aggressive and violent behaviors stresses that no single factor explains violence; rather it is due to a complex interplay of individual, relational, community, and macrosocial influences. Thus, multilevel, or ecological models have been advocated as the theoretical basis to guide research and interventions in important reports on youth violence (e.g., WHO's World Report on Violence and Health, 2002; U.S. Surgeon's General Report on Youth Violence, 2001). For this dissertation, the ecological model is informed by a health inequities

perspective, which supports the assertion that persistent and patterned health inequalities are due to political struggles and vast differences in power and wealth that shape individual or community factors (Hofrichter, 2003). As the populations of interest are primarily immigrant groups, the dissertation is further informed by sociological theories of assimilation. Specifically, the research here is informed by the theory of segmented assimilation, which stresses that groups undergo differential processes of assimilation based on a number of characteristics, such as race, ethnicity, and pre-immigration class status (Portes & Zhou, 1993).

In this dissertation, I incorporate segmented assimilation into a conceptual framework to explain violence among Latino youth because it supplements the limitations of commonly used theories of crime and violence (e.g., Social Disorganization Theory or SDT; Shaw & McKay, 1942; Sampson & Morenoff, 1997). Segmented assimilation highlights the unique paths that immigrants from different national, racial, and generational backgrounds experience into upward social mobility in the United States. This framework is presented in Chapter Two. The sections that follow present an overview of each substantive chapter in the dissertation.

Chapter 2: Examining the Roles of Ethnicity and Gender in Youth Violence among Latinos: A Critical Review

While there have been numerous studies examining risks and protective factors for youth violence in the United States among White and Black populations, understanding youth violence among Latinos has lagged behind. This is in part due to a lack of a unifying framework that understands, not only the experiences of Latinos as minorities in the United States, but also as immigrant populations. Further, the

homogenization of persons from 21 different countries into this pan-ethnic label obscures important differences that may better guide the development of interventions and public policies aimed at addressing youth violence.

Chapter Two is a critical review of the literature on inequalities in youth violence with three objectives: 1) To summarize and critique major community and family theories, highlighting strengths and critical shortcomings in their application to different Latino experiences. I examine these within an ecological model, which has received strong support from the World Health Organization (Dahlberg & Krug, 2002) as it relates to youth violence (U.S. DHHS, 2001). 2) To expand ecological models to include an assessment of larger social structures and historical legacies, highlighting ideological precursors (e.g., racism, sexism) that paved the way for the establishment of conditions at more proximate levels. 3) To propose a conceptual model that is informed by the historical experiences of different Latino groups in the United States. This conceptual model provides a basic framework for examining outcomes associated with experiences of class and racial/ethnic oppression among different Latino groups through the structuring of exposure to risk and protective factors in the neighborhood and family environments. The purpose of the model is to guide the examination of the distribution of violent behaviors, as well as risk and protective factors *within*-Latino subgroups.

Chapter 3: Unpacking the Influence of Family Context on Youth Violence Across Race/Ethnicity: An Analysis Among Latinos, Blacks, and Whites

The family context has been widely identified in the literature as critical to understanding the risk for violence among youth. Despite the broad consensus that the family environment holds a particularly important place in Latino cultures, there are

important shortcomings in the literature linking it to differential rates of youth violence among Latino populations. Chapter Three builds on the different family theories reviewed in Chapter Two to examine several aspects of the conceptual model. Chapter Three is the first empirical study of the dissertation and it addresses several limitations of past research with Latino youth. First, it examines the prevalence of violent behaviors across Mexican, Puerto Rican, and Cuban youths in the United States and how these compare to White and Black adolescents, disaggregating the Latino pan-ethnic category. Second, it extends previous research through an explicit examination of the role of culture, as reproduced in the family, in explaining racial/ethnic differences in youth violence. Finally, it explores whether the effects of different family characteristics on the prevalence of violent behaviors vary across racial/ethnic groups. Specifically, the following questions are addressed:

Do adolescents in different ethnic groups differ in the prevalence of self-reported violent behaviors from White adolescents and from each other?

Do different dimensions of familism decrease the chances of engaging in violent behaviors after adjusting for age, sex, mother's education, family income, and immigrant generation? Do the effects of familism vary by racial/ethnic subgroups?

Chapter 4: Unpacking Neighborhood Socioeconomic Status and Racial/Ethnic Composition in the Risk of Youth Violence: A Multilevel Analysis of Latino, Black, and White Youth

Although a substantial body of work has established a strong association between neighborhood disadvantage and youth violence (Sampson, Morenoff, & Gannon-Rowley, 2002), many of these studies combine economic and racial indicators (i.e., proportion of the population who is Black) into a single measure. This practice

obscures the potential interactive effect between these factors, which may be of critical importance in explaining racial/ethnic differences in violence among Latinos. Further, such research virtually ignores the potential influence of affluence and wealth as protections against violent behaviors. In Chapter Four, I build on neighborhood theories reviewed in Chapter Two, and further the analyses conducted in Chapter Three by examining the role of neighborhood socioeconomic status and racial/ethnic composition in relation to the risk of violent behaviors among Latino youths. These have been identified in the literature as important indicators of risk and protection for youth violence outcomes, and as markers for successful assimilation of immigrant groups into American society (Portes & Zhou, 1993; Alba & Nee, 1997; Massey & Denton, 1985). Specifically, it explores the relation between both neighborhood socioeconomic status and racial/ethnic composition (neighborhood heterogeneity vs. homogeneity) on adolescents' violent behaviors and how these interact to increase or decrease risk across a racially/ethnically diverse sample. The following research questions are addressed:

What influence do neighborhood socioeconomic status and neighborhood racial/ethnic composition have on adolescents of different racial/ethnic groups' risk for violent behaviors?

Does racial/ethnic composition of the neighborhood moderate the association between neighborhood socioeconomic status and the risk of youth violence among ethnically diverse youth?

National Longitudinal Study of Adolescent Health

Data for the dissertation came from the National Longitudinal Study of Adolescents Health (Add Health; Harris et al., 2008), a longitudinal study of health

related behaviors among adolescents. Add Health has been widely used in social science and behavioral research during the last decade, with over 2,200 publications and/or presentations to date. To my knowledge it is the only national study with large enough samples of adolescents of different Latino ethnicities to allow for within-group analyses. Add Health utilized a school-based sampling design, beginning with an in-school questionnaire administered to a national sample of students in grades 7 through 12. They later followed up with an additional sample in a series of in-home interviews approximately one, two, and six years later. Other sources of data include questionnaires for parents, siblings, fellow students, school administrators, and if applicable, interviews with partners. Preexisting databases provide information about communities (www.cpc.unc.edu/projects/addhealth/design).

School Sampling Frame

The Add Health study utilized a complex sampling design with unequal probability of selection. Schools were the primary sampling units and were representative in terms of region of the country, urbanicity, size of student body, type (e.g., public, private, and Catholic), and ethnic distribution of student body. Eligible high schools included an 11th grade with more than 30 students. Those schools that declined to participate were replaced with a similar one in the original stratum. In order to capture a younger population and follow them through the next six years, middle-school students from feeder schools identified by participating high schools were also included. The probability for a feeder school to be selected was contingent on the number of registered students that enrolled in participating high schools. The final

sampling frame resulted in 132 middle and high schools in 80 communities throughout the United States. The response rate for the in-school sample at Wave I was 79%.

In-Home Sampling at Wave I

Add Health began with an in-school survey of over 90,000 students in grades 7 through 12, followed by a series of in-home interviews with 20,745 adolescents and their primary caretaker in 1994. The data used in the studies for this dissertation are from the in-home interviews at Wave I (1994-95), which had a 78.9% response rate. All students registered at the schools were eligible to complete the in-home portion of the study, including those who had completed the in-school questionnaire. Student selection was stratified by grade and sex. Approximately 17 students were chosen at random for each grade/sex stratum for an average of 200 adolescents from each pair of middle and high schools. In addition, Cubans, Puerto Ricans, and Black adolescents with highly educated parents were oversampled to ensure adequate respondents for within-group analyses. Post-stratification weights were used to achieve nationally representative results and to adjust for non-response.

In-Home Sample Description

In order to be eligible for this study, adolescents had to self-identify as Mexican, Mexican-American, or Chicano (9.6%), Cuban or Cuban-American (2.9%), Puerto Rican (3.5%), non-Latino White (59.6%), or non-Latino Black (24.4%). This results in 16,799 eligible participants, of which 16,615 answered the items used in the violent behaviors measure. Adolescents of different racial/ethnic backgrounds did not differ in

age or sex distribution. However, results from the present studies indicate that racial/ethnic subgroups differed in the level of mother's education, family income, and demographic *familism* (see Table 3.1 and 4.1 for details). A more detailed description of the sample is discussed in each empirical chapter.

Contributions to Public Health

In this dissertation, I focus on understanding the within-Latino variations in youth violence, as well as risk and protective factors across different Latino ethnic groups. In so doing, this dissertation addresses several gaps in the current literature. First, it proposes a conceptual model to guide the examination of youth violence among adolescents of different Latino backgrounds. This model unifies many of the family and neighborhood theories that have helped to explain racial/ethnic disparities in violent behaviors, while incorporating theories that highlight the roles of immigration and assimilation processes that may contribute to differences in risk exposure. Furthermore, these processes are examined within an ecological framework, which has been useful in the development of public health interventions for a number of youth outcomes.

Second, this dissertation examines the distribution of violent behaviors within-Latino groups, in addition to risk and protective factors at the family and neighborhood levels that may impact this distribution. A lack of basic descriptive information has ultimately hindered the development of effective interventions for different Latino youths in this country. For example, while Mexican youth in southern California may have many factors in common with Puerto Rican youth in the Northeast (e.g., common language and religious backgrounds), it is unfair to presume that they have similar risk

for violent behaviors or that the same factors influence racial/ethnic disparities among both groups. The empirical studies included in this dissertation address gaps in the literature by exploring which factors contribute to explaining racial/ethnic inequalities in youth violence. In addition, the empirical studies examined whether factors that have been identified as critical in the youth violence literature overall have similar influences for Mexican, Puerto Rican, and Cuban adolescents.

References:

- Alba, R.D., & Nee, V. (1997). Rethinking assimilation theory for a new era of immigration. *International Migration Review*, 31, 826-874.
- Bellair, P.E., Roscigno, V.J., & McNulty, T.L. (2003). Linking local labor market opportunity to violent adolescent delinquency. *Journal of Research in Crime and Delinquency*, 40(1), 6-33.
- Blauner, R. (1969). Internal Colonialism and ghetto revolt. *Social Problems*, 16, 393-408.
- Bronfenbrenner, U. (1988). Interacting systems in human development: Research paradigms, present and future. In N Bolger, A Caspi, & M Moorehouse, (Eds.). *Persons in context: Developmental processes*. New York, NY: Cambridge University Press.
- Bruce M.A., & Roscigno V. J. (2003). "Race effects" and conceptual ambiguity in violence research: Bringing inequality back in. In D.F. Hawkins (Ed.). *Violent crime: Assessing race and ethnic differences*. New York, NY: Cambridge University Press.
- Centers for Disease Control and Prevention, (2006). Youth risk behavioral surveillance – United States, 2005. *MMWR*, 55 (SS-5).
- Delgado, R., & Stefancic, J. (2001). *Critical race theory: An introduction*. New York, NY: New York University Press.
- Durand, J., Telles, E., & Flashman, J. (2006). The demographic foundations of the Latino population. National Research Council. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 66-99) Washington, DC: The National Academies Press.
- Dahlberg, L.L., & Krug, E.G., (2002). Violence – A global public health problem. In E.G., Krug, L.L. Dahlberg, J.A. Mercy, A.B. Zwi, & R. Lozano (Eds). *World Report on Violence and Health*. Geneva: World Health Organization.

- Guerra, N.G., & Williams, K.R. (2006) Ethnicity, youth violence, and the ecology of development. In N.G. Guerra & E.P. Smith, (Eds.) *Preventing youth violence in a multicultural society*. (pp. 17-45) Washington, DC: American Psychological Association.
- Harris, K.M., Halpern, C.T., Entzel, P., Tabor, J., Bearman, P.S., & Udry, J.R. (2008). The National Longitudinal Study of Adolescent Health. Research Design. Web site: <http://www.cpn.unc.edu/projects/addhealth/design>.
- Hofrichter, R. (2003). The politics of health inequities: Contested terrain. In R Hofrichter (Ed). *Health and Social Justice: Politics, Ideology, and Inequity in the Distribution of Disease, A Public Health Reader*. (pp. 1-56) San Francisco, CA: Jossey-Bass.
- Landale, N.S., Oropesa R.S., & Bradatan, C. (2006). Hispanic Families in the United States: Family Structure and Process in an Era of Family Change. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the Future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 138-178) Washington, DC: The National Academies Press.
- Link, B.G., & Phelan, J.C., (2000). Evaluating the fundamental cause explanation for social disparities in health. In C.D. Bird, P. Conrad, & A.M. Freemont (Eds.). *Handbook of Medical Sociology*. Upper Saddle River, NJ: Prentice-Hall.
- Massey, D.S. (1990). American apartheid: Segregation and the making of the underclass. *The American Journal of Sociology*, 96(2), 329-357.
- Massey, D.S., Gross, A.B., & Shibuya, K., (1994). Migration, segregation, and the geographic concentration of poverty. *American Sociological Review*, 59(June), 425-445.
- Massey, D.S., & Denton, N.A. (1985). Spatial assimilation as a socioeconomic outcome. *American Sociological Review*, 50(1), 94-106.
- Mays, V.M., Ponce, N.A., Washington, D.L., & Cochran, S.D. (2003). Classification of race and ethnicity: Implications for public health. *Annual Review of Public Health*, 24, 83-110.

- Mercy, J.A., Butchart, A., Farrington, D., & Cerdá, M. (2002). Youth violence. In E.G. Krug, L.L. Dahlberg, J. Mercy, A.B., Zwi, & R. Lozano (Eds.). *World report on violence and health*, (pp.23-86). Geneva: World Health Organization.
- Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The Annals of the American Academy of Political and Social Science*, 530, 74-96.
- Reimers, C. (2006) Economic well-being. *Hispanics and the Future of America*. M. Tienda and F. Mitchell, eds. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 291-361) Washington, DC: The National Academies Press.
- Rodríguez, C.E. (2000). *Changing race: Latinos, the Census, and the history of ethnicity in the United States*. New York: New York University Press.
- Rumbaut, R.G. (2006). The making of a people. *Hispanics and the Future of America*. M. Tienda and F. Mitchell, eds. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 16-65) Washington, DC: The National Academies Press.
- Sampson, R.J. & Morenoff, J.D. (1997). Ecological perspectives on the neighborhood context of urban poverty: Past and present. In J. Brooks-Gunn, G.J. Duncan, & J.L. Aber (Eds.) *Neighborhood Poverty Volume II: Policy Implications in Studying Neighborhoods*. (1-22). New York, NY: Russell Sage Foundation.
- Sampson, R.J., Morenoff, J.D., & Gannon-Rowley, T. (2002). Assessing “neighborhood effects”: Social processes and new directions in research. *Annual Review of Sociology*, 28, 443-478.
- Shaw, C.R., & McKay, H.D. (1942). *Juvenile delinquency in urban areas*. Chicago, Ill.: University of Chicago Press.
- Smith, E.P., & Guerra N.G. (2006). Introduction. In N.G. Guerra, & E.P. Smith, (Eds.). *Preventing youth violence in a multicultural society*. Washington, DC: American Psychological Association.

- Smith C., & Krohn, M.D. (1995). Delinquency and family life among male adolescents: the role of ethnicity. *Journal of Youth and Adolescence*, 24(1), 69-93.
- U.S. Department of Health and Human Services. (DHHS) (2000). *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, D.C. U.S. Government Printing Office.
- Williams, M., MacMaster, S.A., & Ellis, R. (2002). Serious, violent juvenile offenders. In R. Rapp-Paglicci, A. Roberts, & J. Wodarski (Eds.) *Handbook of Violence*. New York: John Wiley & Sons
- Wilkinson, R.G., Kawachi, I., & Kennedy, B.P. (1999). Mortality, the Social Environment, Crime, and Violence. In I. Kawachi, B.P. Kennedy, & R.G. Wilkinson, (Eds.). *The Society and Population Health Reader: Income Inequality and Health*. (pp. 305-319) New York, NY: New York Press.

CHAPTER 2

EXAMINING THE ROLE OF ETHNICITY IN YOUTH VIOLENCE AMONG LATINOS: A CRITICAL REVIEW

Many recent public policies meant to address violence have been driven by images of gangs and drug dealers in poor, inner-city Latino and African American communities described as infested with social pathologies that destroy the fabric of society (Stein, Katz, Madriz, & Shick, 1997; Peterson, Esbensen, Taylor, & Freng, 2007). In this chapter, I argue that much of what is considered to be healthy is based on notions of Euro-American, middle-upper class values thoroughly entrenched in popular culture through media representations of normality (Coontz, 1992). Many studies continue to build off traditional developmental perspectives that fail to examine important socioeconomic and cultural differences across populations, or the necessary adaptations to the detrimental forces that structure social inequalities.

A considerable amount of research on Latino health has found lower levels of morbidity and/or mortality than expected given lower levels of socioeconomic status (Falcón, Aguirre-Molina, & Molina, 2001; Carter-Pokras & Zambrana, 2001). However, this “Latino paradox” does not necessarily extend to violence outcomes. National trends in homicides and violent crimes indicate an increased risk among Latinos compared to Whites. Some national estimates show variations by type of violent behavior when comparing racial/ethnic⁴ groups (Franke, 2000), while others show evidence of a much

⁴ For the purpose of this discussion I follow the US Census definitions of race and ethnicity, which specifies four races (American Indian or Alaskan Native, Asian or Pacific Islander, white, and black), and

smaller difference in the risk of violence between Whites and Latinos compared to Whites and African Americans (Sampson, Morenoff, & Raudenbush, 2005; Kaufman, 2003; CDC, 2006).

Despite these mixed findings, most estimates indicate that Latino and African American youth have higher rates of violent behaviors compared to the general population. Two important limitations force these findings to oversimplify a complex picture of racial/ethnic inequalities in violence, including (a) the homogenization of Latinos and (b) the binary view of race relations that has constrained the literature. The former does not consider potential ethnic, racial, gender, and generational differences within the population; the latter obscures important differences in exposure to community processes (e.g., segregation, exposure to affluence/poverty, immigrant communities) that affect family environments, and ultimately may protect or encourage Latino youth from engaging in violent behaviors. In order to better understand social processes that perpetuate inequalities in violence, I examine several levels of social interaction (e.g., family, community) from the economic and political history of people of color in the United States.

Healthy People 2010 stressed the importance of reducing inequalities in violence (specifically homicides, assaults, physical fighting, and weapon carrying among adolescents) as an important public health problem, and argued that prevention efforts must address poverty, discrimination, and access to education and employment opportunities to have a significant impact (U.S. Department of Health & Human Services

Latino/Hispanic as an ethnicity. The ethnic subgroups specified throughout the text refer to the specific Latino national origins. For a more detailed discussion on the creation and evolution of the US Census classifications and Latino/Hispanic as a pan-ethnic category see Rumbaut (1996), Delgado and Stefancic (1998), Flores, J. (2000), Darder and Torres (1997), or Romero, Hondagneu-Sotelo, and Ortiz (1997)

[DHHS], 2001). This recognition of non-individual factors underscores the importance of macro-structural ones in the distribution of violence. Hofrichter characterizes health inequities more generally as systemic and unjust, resulting from a lack of political power.

He specifically argues that:

“These patterned, persistent inequities are due primarily to failed political struggles and power imbalances, not ad hoc events, individual failures, or the inevitable consequences of modern society. Material conditions such as poverty, inadequate housing, and excessive air pollution, generated by law, public policy, corporate decision making, and sometimes violence, produce and perpetuate health inequities. These conditions often derive from the institutional political and social power conferred by great inequalities of wealth.” (2003; 1)

Although numerous studies have examined determinants of differences in violence outcomes since the early 20th century, the last decade has been marked by a serious debate about inequality and the principle of social justice in this line of research (Bellair, Roscigno, & McNulty, 2003; Bruce & Roscigno, 2003; Dahlberg & Krug, 2002; Wilkinson, Kawachi, & Kennedy, 1999).

This chapter is a critical review of the literature on inequalities in youth violence with three objectives: 1) Summarize major neighborhood and family theories, highlighting strengths and critical shortcomings in their application to the different Latino experiences. I examine these within an ecological model, which has received strong support from the World Health Organization (Dahlberg & Krug, 2002) and draws upon major reviews of youth violence (DHHS, 2001). 2) Expand ecological models to include an assessment of larger social structures and historical legacies, highlighting ideological precursors that paved the way for the establishment of conditions at lower levels. 3) Propose a conceptual model that is informed by the historical experiences of different

Latino groups in America. It provides a basic framework for examining outcomes associated with experiences of class and racial oppression through their structuring of neighborhood factors and family environments.

My focus is on unpacking and rethinking the process by which larger structural economic inequality shapes violent behaviors among Latino youth through its impact on neighborhoods and families. Based on Blauner's (1969) notion of internal colonialism I characterize as colonial or neo-colonial the historical dimension of the relationships between the United States and different Latin American countries, and the position of Latinos in the United States. My interpretation is rooted within an understanding that centuries of institutionalized discrimination, violence, and oppression against minority populations - in particular Latinos and African Americans - shaped and continue to influence their social and economic well-being. The negotiations for space and resources among these populations, within racist hegemonic social structures, have pushed them into high stress environments where the use of violence is more common and, in *some* instances, necessary for survival. The chronic strain of structural inequities on communities and families may hinder the ability to provide their youth with environments filled with various positive institutions, as well as decrease the protective effect of those that exist. This compromises the guidance and support available to and needed by young people in order to navigate harsh social conditions strongly associated with violent behavior. Under these conditions, adolescents who perpetrate violence are also victims of larger, institutionalized violence that stems from centuries of colonial and post-colonial oppression.

Since the Civil Rights movement the theory of internal colonialism has been used to underscore the experiences of residential segregation and economic isolation experienced by different minority groups in the United States (Blauner, 1969; Flores, 1993). In particular, it highlights the forced encounter and the persistent concentration of many African Americans and Latinos in poor, inner city neighborhoods across generations. In this sense, the colonized are populations who have entered an uneven, coercive relationship with the United States through violent suppression during slavery, the conquest of lands, and colonization of nations. The colonial subjects were later geographically and socially marginalized through racist institutional policies (e.g., Jim Crow, real estate red-lining), which in turn supported mediated and personal forms of racism (Jones, 2000). Populations who have been continuously marginalized have a greater probability to live in communities that have higher rates of crime and violence. In addition, the notion of the colonized heightens the historical dimension of the relationship between Mexico, Cuba, and Puerto Rico vis-à-vis the United States. My goal in this chapter is to expand on previous research on inequalities in violent behaviors among young people of color and focus specifically on exploring the role of both cultural and structural factors that may explain the prevalence among different racial/ethnic subgroups in the United States. I place particular emphasis on Mexican, Cuban, and Puerto Rican adolescents, who have been the focus of the majority of literature on Latinos and the three largest ethnic subgroups in the country.

Background and Significance

Latinos and Youth Violence

The size and rapid growth of Latino populations confirm that their health and well-being is inextricably tied to that of the nation's future. In 2003 US Census confirmed that the group has become the largest minority in the United States. By this time there were 40 million Latinos and it is expected that by 2050 they will account for over 25% of the total U.S. population (Rumbaut, 2006). The impact of large scale immigration of children and young adults, and increases in Latino birth rates suggest that this pattern of growth will continue into the foreseeable future. In addition, the population is significantly younger than non-Latinos, although some variation exists by nationality (Durand, Telles & Flashman, 2006).

These rapid changes in American demographic composition signal a new urgency for understanding within-group variations among Latinos. With regard to youth violence, they remain an understudied group still not included in many important reports examining violent behaviors or victimization (Smith & Guerra, 2006). "Latinos" include people whose origins (through birth or ancestry) can be traced back to 21 countries in Latin America, the Hispanic Caribbean, and Spain. Seventy percent of Latino youth in the United States are of either, Mexican (58%), Puerto Rican (9%), or Cuban (3.5%) descent. Labels used to describe these populations have changed through out the decades.

In 1976 the US Census Bureau added a Spanish-origin self-identifier in standardized forms. The label of "Spanish-origin" was later reworded into Hispanic or Latino, terms which have been effectively racialized alongside labels for Asians, blacks, and non-Hispanic whites (Rumbaut, 2006). The use of a single category to classify all

persons from Spanish-speaking countries presumed not only a single language (one should not forget that great sections of populations within Latin American countries do not speak Spanish), but also religious and cultural affinity. On the one hand there have been recent calls for demographic specificity in research; yet, most studies still do not distinguish outcomes by subgroup, effectively ignoring markedly different histories of immigration, geographic settlement, socioeconomic position, and political clout, among other factors (Landale, Oropesa, & Bradatan, 2006; Rumbaut, 2006; Flores, 2000; Falcón, Aguirre-Molina, & Molina, 2001). Any attempt to account for outcomes among any Latino subgroup, or the pan-ethnic group, must consider the historical and geographic context of their presence and dispersion in the United States. On the other hand, there are important benefits that have come with a united pan-ethnic identity, particularly in the political arena. Rumbaut (2006) reminds us that “despite those group differences, the tens of millions of persons so classified do share a common label that symbolizes a minority group status in the United States, a label developed and legitimized by the state, diffused in daily and institutional practice, and finally internalized (and racialized) as a prominent part of the American mosaic” (19). As a result, most data are available for Latino youths as a pan-ethnic category, rather than for specific sub-groups.

Table 2.1 shows national results of adolescents’ engagement in serious violent behaviors. Using the National Longitudinal Study of Adolescent Health (Add Health), Franke (2000) found that compared to Whites, African American and Latino adolescents were significantly more likely to engage in a serious physical fight and/or threaten someone by pulling a gun or knife during the previous year. While Latinos have

somewhat lower rates on these measures than African Americans, they are significantly more likely than African American youth to have shot or stabbed someone. McNulty and Bellair (2003a) and Kaufman (2005) also found Latinos to have higher rates of serious violent behavior compared to African Americans. However, Sampson, Morenoff and Raudenbush (2005) reported that in Chicago, African Americans had the highest risk of committing a violent act compared to Whites, while Mexicans had the lowest risk of violent behaviors in the sample. The risk for Puerto Ricans/Other Latinos was 30% higher than Mexicans and 26% higher than Whites. In their study, this difference was significant in basic models, but different elements in the family and neighborhood environments accounted for them in their multivariate analyses. By making a distinction between Mexicans and other Latinos this study challenges the assumed homogeneity in the pan-ethnic label and provides support for the significance of carrying out subgroup analysis. Most previous studies of youth violence have not made this critical distinction.

Table 2.1. National Estimates of Serious Violent Behavior by Race

Study Title	Behavior	Total Samples	Whites	African Americans	Latinos
Youth Risk Behavioral Surveillance System, 2005					
	Took part in a physical fight in previous 12 months	35%	33.1%	43.1%	41%
	Carried a weapon during previous 30 days	18.5%	18.7%	16.4%	19%
Healthy People 2010					
	Physical assault during previous 12 months	36%	33%	41%	40%
	Carried a weapon during previous 30 days	6.9%	6.4%	5.0%	7.9%
Add Health, Franke, 2000					
	Serious physical fight	32.8%	29.3%	42.4%	40.2%
	Seriously injure someone	18.4%	16.9%	23.9%	20.3%
	Pulled knife or gun	4.5%	3.0%	8.8%	6.7%
	Shoot or stabbed someone	1.9%	1.5%	2.5%	3.4%

When it comes to sex differences in violent behaviors, there is a clear consensus in the literature and crime statistics that males are at increased risk. In part due to substantially lower rates among females. Violence among girls has received considerably less attention than boys. However, government crime statistics show a shrinking gap in rates of violent and non-violent delinquency between males and females that has been attributed to increases in females' use of violence. For example, the number of women arrested rose by 50% between 1989 and 1998 (U.S. DHHS, 2004), and the Federal Bureau of Investigations' Uniform Crime Report (UCR) shows that adolescent girls make up approximately 22% of female arrests and 20% of all juvenile arrests (U.S. DHHS, 2004). In 2002, 6.2% of adolescent females reported attacking someone with the intent to injure them during the previous year. Among this group African Americans had the

highest rates (11.3%), followed by Latinas (6.8%) and Whites (4.9%) (U.S. DHHS, 2004).

Several limitations make conclusions based on crime statistics questionable when it comes to assessing the prevalence of violent behaviors across gender or racial/ethnic groups. First, not all crimes are reported. Second, not all violent behaviors are considered a crime. Third, males and racial/ethnic minorities have disproportionately been the target of police and law enforcement interventions. Fourth, there is no information regarding the specific rates by ethnic subgroups of Latinas. In addition, studies have questioned whether the sex gap of violent behaviors is in fact narrowing. Steffensmeier, Schwartz, Zhong, and Ackerman (2005) found that longitudinal trends across self-reported sources showed a stable or increasing gap in assaults, while only the UCR showed a narrowing. Definitions of violence that include less severe behaviors and more surveillance of females may be a key factor in determining the extent of sex differences (Steffensmeier et al., 2005).

Females' use of violence has traditionally been seen as an aberration of acceptable female behaviors. The ideal feminine woman is pictured as nurturing, protective, and primarily the victim of violence – not the perpetrator. As such, research on violence and aggression have focused on males or developed what superficially seem to be gender-neutral theories (e.g., social control theory, social learning theory, social disorganization theory, general theory of crime). However, several scholars have critiqued this practice, arguing for gender-specific theories that incorporate the unique experiences of females (e.g., differences in victimization and supervision due to socialization practices). Using the Add Health data, Daigle, Cullen, and Wright (2007) found that factors identified in

both gender-specific and general theories of crime had significant effects on male and female delinquency, but the relevance varied by group. They found parental conflict, academic success, impulsivity, and risk behaviors were more important among females; while victimization, strain, involvement in conventional activities (watching TV, sports), attachment to friends, attachment to mother, attention deficits, age, and prior history of delinquency were more influential among males. Interestingly, in a sample of primarily Latino youth in California, Hart, O'Toole, Price-Sharps, and Shaffer (2007) found females to have a greater number of risk factors for violent and non-violent offending than males, but no differences in number of protective factors. Nevertheless, factors included by Hart and colleagues (2007) and Daigle and colleagues (2006) in their respective studies focused on individual and relational aspects. They did not consider neighborhood dynamics that may have differential impacts on the risk violent behaviors, how these dynamics may affect gender, nor look at racial/ethnic differences by sex.

In one of the few studies assessing the role of community factors in male and female violence rates, Jacob (2006) looked at neighborhood socioeconomic status, residential instability, ethnic heterogeneity, and urbanization within municipal police jurisdictions in Canada. She found that most of the characteristics that affected males' crime rates were also similar for females' crime rates. Residential instability and neighborhood SES were the primary predictors, while higher levels of educational attainment and occupational status in the community reduced the risk. However, the percentage of the community who had high incomes was positively associated with higher crime rates. Ethnic heterogeneity slightly decreased the risk among males, while population size decreased the risk for females' violent crimes. In a study of sex,

racial/ethnic, and community differences in violent behaviors among 8th graders across 11 locations in the continental United States, Peterson, Esbensen, Taylor, and Freng (2007) found that serious and general violent offending scores varied substantially by geographic location, noting the impact of place in violence disparities. They found that across sites females commit a substantial amount of violent behaviors. In particular, females in Kansas City and Milwaukee had higher rates than boys in nine of the cities. Looking at racial/ethnic differences, they noted that Whites in Kansas City had rates higher than African Americans in five cities and Latinos in seven cities, suggesting a strong contextual effect. Further research should expand on these differences, exploring the specific dynamics of different cities in the country and their effects on gender as a social construct.

These findings raise important questions regarding the role of gender, race, and ethnicity in the reproduction of inequalities in violence among America's youth. Are racial/ethnic differences consistent for males and females? That is, can we expect the order of the prevalence and/or frequencies to be consistent across race/ethnicity and gender? Is there a significant gap in violent behaviors across genders for different racial/ethnic subgroups? Do family-environmental and neighborhood characteristics have similar effects across racial/ethnic/gender subgroups?

Exploring Precursors of Violence Among Latino Youth

Most empirical work on violence among Latinos has been limited to homicide or analyzing whether factors that seem to affect Black-White differences have a similar impact on Latinos (Martínez, 1996, 2002, 2003; Kaufman, 2005; Blum et al. 2000;

Hawkins, Laub, & Lauristein, 1998). Data is remarkably scarce given Latinos' overrepresentation in homicide and the presence of multiple environmental risk factors. The paucity of theoretical and empirical work on violence among this group has forced most studies and reports to extrapolate information from African Americans to Latinos and from adults to adolescents. Although current studies are partly justified by the common experiences of discrimination and oppression among different racial and ethnic minority groups in the country, this practice highlights the unstated presumption that experiences can be reduced to the social relationships between African Americans and Whites. The experiences of the former are viewed as "prototypical", imposing a dichotomous view of race relations that ignores the shades and forms of racism and discrimination (Delgado & Stefancic, 2001). According to Delgado and Stefancic, this type of binary thinking:

“...simplifies analysis dangerously, presenting racial progress as a linear progression; it can end up injuring the very group, for example blacks, that one places at the center of discussion. It weakens solidarity, reduces opportunities for coalition, deprives the group of the benefits of others' experiences, makes it excessively dependent on the approval of the white establishment, and sets up for ultimate disappointment” (70).

Furthermore, this view minimizes attention given to tangible economic and psychological benefits obtained by dominant society in the perpetuation of this divisive cycle. Further, it does not consider potential sources of discrimination that are unique to immigrant groups, such as language, immigration status, and gender socialization, potentially fostering tensions between African Americans and other minority groups in the country.

Sociological theories that examine the new second generation of immigrants (post-1964) shed light into sources of differences among Latino subgroups. Classic

assimilation theorists argue that immigration leads newcomers into a marginal position where individuals are pushed and pulled between the values, attitudes, and behaviors of their native and host countries. Gordon (1964) identified seven dimensions of assimilation and stressed that successful adaptation required the cultural assimilation (i.e., acculturation) of groups prior to their incorporation into the social and economic institutions of the host majority. Since then, others have argued spatial assimilation and economic mobility are inextricably tied, especially among racial minority groups (Massey & Denton, 1985; Santiago & Wilder, 1991; Santiago & Galster, 1995). In this view, newly arrived groups will eventually “melt” into the dominant group achieving economic, spatial, and cultural assimilation in successive generations.

Several studies have shown how different Latino groups experience diverse paths into American mainstream socioeconomic standards (Fischer & Tienda, 2006; Landale, Oropesa, & Bradatan, 2006; Schneider, Martínez, & Owens, 2006). Portes and Zhou (1993) argued that Latinos do not uniformly go through upward mobility. Some groups undergo downward mobility with increases in poverty, residential segregation, and negative health outcomes in subsequent generations (Portes, Fernández-Kelly, & Haller, 2005). Further still, others experience upward economic mobility, while retaining strong cultural identities and spatial distance from White Americans (Zhou, 1997). Segmented assimilation theory identifies important individual-level factors (e.g., education, aspirations, English-language proficiency, gender, place of birth, age of immigration, and length of residence) as well as structural factors (e.g., racial status, family socioeconomic background, and place of residence) that influence immigrant adaptation. An important example of segmentation is the different experiences of residential segregation.

Although segregation has increased for all Latinos since the 1980s, different subgroups have not experienced the same degree of economic marginalization that generally accompanies it. Grenier and Pérez (1996) have suggested that in the case of Cubans in Florida, residential segregation has been self-imposed and led to the development of an upwardly mobile and politically powerful ethnic enclave (although Pedraza [1996] notes this varies widely by migration wave). On the other hand, Massey and colleagues (Massey & Bitterman, 1985; Massey, Gross, & Shibuya, 1994) found that Puerto Ricans' experiences of residential segregation, rates of female-headed households, and poverty were similar to that of African Americans. Overall, Mexicans' levels of segregation are lower than Cubans and Puerto Ricans and their economic positions tend to vary widely (Frey & Farley, 1996; Fischer & Tienda, 2006).

It is important to understand how immigration experiences affect the well-being of Latino youths and their families. Approximately 39% of the Latino population is foreign-born, and studies have found that the presence of first generation immigrants in a community to be a protective factor against violent behaviors (Sampson, Morenoff, & Raudenbush, 2005; Martínez, 2002). However, we must consider the effects of immigration on the family and community spheres that may foster a sense of alienation among youth. Acculturation, family dynamics, and adolescents' experiences with the educational system have been found to impact risk behaviors across groups (Ramírez et al., 2004; Boutakidis, Guerra, & Soriano, 2006; Fuligni, Tseng, & Lam, 1999). Concurrent with the general processes of growth and development during adolescence, ethnic minority children are subject to socialization goals and adaptations aimed at

protecting them from exposure to risks in larger society (Harrison, Wilson, Pine, Chan, & Buriel, 1990).

Within the family, immigration and acculturation may foster intergenerational tensions that ultimately may contribute to adolescents' violent behaviors. Parents who adhere to values and behavioral expectations emphasized in their native countries may render unacceptable the overemphasis on individualism and gender roles in mainstream America (Jelin, 1991; Zhou, 1997). Furthermore, many first generation parents encounter a society where their work and educational experiences are not valued. Language barriers and a hostile, anti-immigrant environment have forced millions of workers into low-skilled, low-wage work and restricted access to education, health care, and material resources. This may lead to a shift in parental roles, since the security and protection generally afforded by parents may not be present due to the low status in U.S.-social structures of recent immigrants. For example, English-only policies and the dearth of culturally affirming and bilingual education push many to the sidelines fostering disengagement from school for both parents and students. Further, economic pressures faced by parents working in low-wage, low-security jobs interfere with their ability to fully engage in their children's upbringing. Many of these parents are not able to meet with teachers due to conflicting work hours and are forced to leave adolescents unsupervised after school (Schneider, Martínez, & Owens, 2006; Villarruel & Montero-Sieburth, 2000).

Immigration and assimilation may also change family dynamics. A vast literature supports the association between family environments and adolescents' aggressive behaviors across different racial and ethnic groups (Loeber & Hay, 1997; Dahlberg &

Potter, 2001; Fitzpatrick, 1997; Kim, Hetherington, & Reiss, 1999; Jackson, & Foshee, 1998; Halgunseth, Ispa, & Rudy, 2006). In a study of family influences on adolescent males' delinquent behaviors, Smith and Krohn (1995) found family environment (measured as parent-child attachment, involvement, parental control, single parent families, and economic hardship) accounted for twice the variance in violent behaviors among Latinos compared to African Americans and Whites, and different aspects of the family environment affected youths in each of the groups. Their finding stresses the importance of family among Latinos; however, it did not specify who made up their Latino sample nor did it consider the potential within-group variation due to immigration.

In a recent review of the literature on Latinos and youth violence, Mirabal-Colón and Vélez (2006) suggested cultural values may impact violent behaviors through individuals' concern with fulfilling familial roles and obligations. These in turn may vary by national origin, race, gender, and immigration experiences. However, the role of culture has remained a serious gap in the research literature. With the exception of Pabón (1998) and Rodríguez and Weisburd (1991), who focused on elements of *familism* among Puerto Ricans in New York City, research has not empirically examined the role of cultural, family-level factors on adolescents' violent behaviors. Furthermore, there are still serious problems with the way in which families are conceptualized and assessed. One must use caution when using assimilation theories (particularly those focused on cultural assimilation), since they can be interpreted as stemming from ethnocentric perspectives that place a hegemonic, White, America at the pinnacle of social mobility.

Measurements of family structure, attachment/connectedness, support and supervision of children focus on parent-adolescent relationships and the development of

independence among youth in nuclear, two-parent households, generally do not consider the experiences of people of color, who have been shown to have different parenting styles, family and household structure arrangements, and socialization goals (Harrison et al., 1990), including interdependence and expanded families (Jelin, 1991; Lomnitz & Pérez-Lizaur, 1991). Far from being social pathologies – as the culture of violence theory suggests - these differences can be seen as adaptive strategies to dangerous environments, labor and child care needs, and the continual devaluing of their lives and communities by the larger society (Stack, 1974; Rupp, 1991; Jarrett, 1997). An interdisciplinary approach is needed to understand the complex play of factors that impact the well-being of Latino youths. Such an approach can help answer questions about the influence of family, community, and societal forces on violent behaviors across subgroups.

Specifying the Ecological Model: Levels of Interaction

Ecological Models

Ecological systems theory highlights the dynamic social, historical, and cultural milieus in which people relate within multiple systems of interaction (micro-, meso-, exo-, macro-, and chronosystems) (Bronfenbrenner, 1988). The microsystem contains all direct relationships and interactions a person has with his or her immediate surroundings (e.g., family, school, neighborhood, work) and has the strongest, bidirectional influence on a person's development. The interaction of environments within and across systems is critical in the ecological theory. The mesosystem is where the connection between the environments in the microsystem occurs (e.g., families and schools or families and neighborhoods). The exosystem includes the larger social

structures that impact the development of individuals by interacting with structures in the microsystem (e.g., parents' work schedules that may interfere with time spent with children), while the macrosystem highlights the cultural values, customs, and larger political and economic systems that shape those interactions. These systems put in context findings between the connections of individual, family, and neighborhood factors and adolescent violence through new interpretations of cultural theories that demonstrate adaptations to minimize the impact of poverty, discrimination, and social alienation encountered in different systems. Finally, the chronosystem incorporates the dimension of changes in time in the different systems (Bronfenbrenner, 1988).

There is increasing consensus that societal levels (i.e., family, peers, community, and social/macro) are interconnected and that focusing on a single one provides only a partial, and sometimes inaccurate, representation of the influences on violent behaviors. The World Health Organization agrees that “violence is the result of the complex interplay of individual, relationship, social, cultural, and environmental factors. . . . [U]nderstanding how these factors are related to violence is one of the important steps in the public health approach to preventing violence” (Dahlberg & Krug, 2002; 12). Although identifying the specific precursors of violent behaviors at multiple levels may seem like a lofty goal, research must begin to consider such complexity in order to enact and develop appropriate public policies that address the dramatic racial/ethnic/gender differences in violent behaviors. This may increase the efficacy of interventions at lower levels that alter the distribution of risk factors that contribute to the problem.

Despite such broad consensus on ecological models for violence prevention and the role of environments on inequalities in violence, studies on Latino youth continue to

stagnate. Due to sampling constraints, the majority of research using ecological models has not included analysis of the combined influence of race, ethnicity, and gender. Most studies provide results as discrete categories – race/ethnicity rates and separate sex comparisons (in an effort to speak to gender dynamics) - limiting our understanding of the intersectionality of identities through a multilevel lens. Furthermore, the majority of the literature including Latinos has focused on males, leaving a gap in our knowledge of the experiences of Latina adolescents (Walker, Maxson, & Newcomb, 2007; Gorman-Smith, Henry, & Tolan 2004; Smith & Krohn, 1995).

In the case of Latinos, ecological models allow an interpretation that considers the interface of structural and cultural factors. Ortner (1989) stresses that individuals' behaviors take place in circumstances created by asymmetrical power relationships through historical and cultural settings. She posits that only by interpreting actions, practices, and structures through a historical lens can their relationship be fully played out. We must move forward with research that examines the intersection of these dimensions at multiple levels with a strong sense of the sociohistorical context, and pay special attention to the influence of culture-specific norms and values that impact the family and adolescent development. In a similar argument, Cockerham (2005) points out that structure and agency act together to create one's attitudes, behaviors, and, ultimately, health outcomes. He argues that the interplay of life chances and choices is heavily influenced by individual socio-demographic factors and environmental conditions (i.e., age, socioeconomic class, gender, race, ethnicity, collectivities, and living conditions). Keeping this in mind, we must develop and operationalize models that examine the interface between structural and cultural factors as dynamic, mutually constitutive

processes (Ortner, 1995; Cockerham, 2005). This is particularly important when confronted with a complicated history of immigration, and a strong pursuit of assimilation ideals, as is the case with Latinos in the U.S. In the following sections, I summarize findings from studies that examine the effects of community and family environments in explaining inequalities in violent behaviors, and highlight their usefulness in exploring *within*-Latino variations.

Community

Urban ecological theorists, who point to the combined influence of family and neighborhood characteristics, have conducted the most comprehensive work in public health and sociological literature thus far addressing inequalities in youth violence. It has heavily built upon the work of the Chicago School of Sociology and Social Disorganization Theory (SDT), and primarily focused on understanding Black-White differences in crime and violence (Peterson & Krivo, 2005; Sampson & Wilson, 1995). Recent research in this line has evidenced significant differences between Latinos and Whites (Kaufman, 2003; Sampson, Morenoff, & Raudenbush, 2005), and highlighted the role of inequality on violent outcomes (Martínez, 2002). The spatial concentration of wealth and poverty influences the neighborhood context through the availability and quality of institutional resources and the presence of stressors that affect social relationships (e.g., drug trafficking, arson, police interactions) (Schulz & Northridge, 2004; Wilson, 1987). In turn, neighborhoods have significant influence on families, adolescents' relationships with other peers, and may directly impact the opportunity for violent encounters.

Community contexts are defined in various ways in the literature, with most classic definitions including a geographic dimension. Darling and Steinberg (1997) identify communities as an “aggregation of individuals who share resources and a common sense of identity, whether or not these individuals actually know one another” (p. 121). Both structural and cultural theories focus on conditions of geographic units and how these affect violence in a given location. Especially when focusing on adolescents’ behaviors one must consider whether schools and peers share the same residential spaces or geographically surrounding areas. Thus, for the purposes of this discussion I use a geographic definition, particularly as it pertains to urban environments where residential segregation is a visible, recurring factor. Given that adolescents’ places of social interactions may change several times in the course of one day, youth violence may be best understood by looking at the larger community unit, rather than immediate neighborhood surroundings (Darling & Steinberg, 1997; Sampson, Morenoff & Gannon-Rowley, 2002). Although analysis of youth violence must pay close attention to youths in suburban and rural settings, it is important to note that most racial and ethnic minority youth live in urban areas.

Shaw and McKay (1942), part of the famous Chicago School of Sociology, found that neighborhoods with high poverty rates, deteriorated housing, and an unstable population had higher rates of negative outcomes (e.g., infant mortality, low birth weight, tuberculosis, mental disorders, and crime). They argued that there was an independent influence of neighborhood conditions and attributed findings on multiple health outcomes to *disorganizing* factors, which resonated with many policy makers. Sampson and Morenoff (1997) defined social disorganization as:

“...the inability of a community structure to realize the common values of its residents and maintain effective social control. The structural dimensions of community social disorganization refer to the prevalence and interdependence of social networks in a community and in the span of collective supervision that community directs toward local problems. Social organization is reflected in both informal networks (for example, in the density of acquaintanceship, intergenerational kinship ties, and mutual guardianship) and formal institutions (as with organizational density or institutional stability)” (16).

Social Disorganization Theory (SDT) views community organization and disorganization as falling in a continuum, and identifies several social and structural characteristics that explain differing rates of violence across racial/ethnic groups rather than just the presence of minorities in a given geographic location. According to Sampson and colleagues, these characteristics vary systematically across communities along the following dimensions:

- a) Socioeconomic status (e.g., poverty, wealth, occupational attainment)
- b) Family structure and life cycle (e.g., female-headed households, child density)
- c) Residential stability (e.g., home ownership and tenure)
- d) Race-ethnic composition (e.g., segregation).

Through this lens, neighborhoods are thought to be structurally *disadvantaged* in areas with low socioeconomic status, high numbers of female-headed households, and rapid residential turnover. Areas with high levels of structural disadvantage limit the ability of residents to maintain social controls creating *social disorganization*. In this view, the processes of socialization and control of adolescents are rooted in community characteristics. Adolescents who grow up in socially disorganized areas will be more likely to engage in violence regardless of incident location (which can be within their homes, neighborhoods, schools, or other geographic spaces) (McNulty & Bellair, 2003b).

In a country with high levels of racial and ethnic residential segregation coupled with vast economic inequality and poverty, it is impossible to truly compare rates between Whites and minority youth because even the poorest White neighborhoods show lower rates of structural disadvantage than the average African American and Latino neighborhoods (Sampson & Morenoff, 1997; Peterson & Krivo, 2005; Bruce & Roscigno, 2003). Socioeconomic status has been identified in the social epidemiology literature as a fundamental cause of health outcomes (Link & Phelan, 1996; 2000). In addition, residential segregation has also been identified as fundamental because it shapes socioeconomic status across the individual, household, neighborhood, and community levels for different racial/ethnic groups (Williams & Collins, 2001). Both factors have been described as important indicators of immigrant groups' structural assimilation into the American mainstream (Portes & Zhou, 1997), thus underscoring the need to assess the interaction of both factors when exploring violence among Latinos.

Both Wilson (1987) and Massey (1990; 1994) made important contributions to the understanding of how residential segregation fosters social disorganization among African Americans in the United States. Despite their contrasting emphasis on class versus race, both are concerned with the simultaneous presence of racial and economic segregation. Wilson proposed that extreme concentration of poverty in African American communities creates social isolation from mainstream society. Particularly after the 1980's, images presented of the urban ghetto by the news and media further isolated the population from others (Stein et al., 1997). Massey argued that residential segregation and economic disadvantage interact to create structural conditions that reinforce deprivation. Segregation leads to the spatial concentration of poverty, wealth, and social

relationships that result in racially patterned and geographically clustered inequality (Massey, 1990; 1994). In an effort to improve traditional SDT, Sampson and Lauritsen (1994) argued that larger processes, such as segregation, discrimination, and the local economy, impact adolescents' violent behavior through their detrimental influence on communities and families' dynamics. These circumstances inhibit communities' ability to organize, respond to, and prevent crime and violence.

Using the Add Health data to examine how communal and social psychological processes explain racial and ethnic differences in youth violence, Kaufman (2005) found that neighborhood disorganization - measured as disadvantage, urbanicity, and residential stability - had a significant curvilinear effect on violence, where at very high levels of disadvantage youths' violent behaviors begin to decrease. She attributed the finding of lower rates of violence among Latinos compared to African Americans to differences in married-families, social integration, and employment in low-wage jobs rather than no jobs (2003). This study, like so many others, uses a composite measure of disadvantage (i.e., the proportion of persons with income below the poverty line, unemployment rate, the proportion of female-headed households, and the proportion of persons on public assistance). Such a measure does not consider important within-Latino group variations in these dimensions, nor the social psychological processes that show resilience and adaptation at the community level. Furthermore, although she acknowledged the role of factors that may be especially salient for Latinos, such as social integration and employment, she did not include these in her analysis. Her hypothesis regarding these factors remains to be tested.

A critical re-examination of Social Disorganization Theory is urgently needed prior to conducting research guided by it. First, one must consider that the failure to examine within SDT how relationships between family and household members are, in part, determined by the structural conditions of neighborhoods allows the burden of responsibility to remain at the family or individual levels. An important body of qualitative research has explored the resilience and coping strategies of families who live in high risk neighborhoods (Jarrett 1997a, 1997b; Stack, 1974), providing a more nuanced understanding of these neighborhoods by highlighting how reciprocal networks among neighbors afford a web of resources that maximizes parents' time and out-of-neighborhood resources. Second, expanding on Massey and Wilson's arguments, youth violence research must consider that it is not an issue of *either class or race*, and by extension classism or racism, but rather the *intersection of both* in a society that has yet to openly acknowledge the *persistent* role of these ideologies in shaping our social interactions. Using measures that combine residential segregation and economic indicators conflates the findings and interpretations, which may work in different directions, particularly for immigrant groups who show an admixture of racial, ethnic, and class backgrounds (Portes & Zhou, 1997).

Third, we must examine the choice of constructs and consider if these may be proxies for other factors. Many of the factors identified by Sampson are commonly measured and interpreted from a deficit perspective, which have been heavily critiqued by scholars who remind us that the voices of people of color have not been included in the construction of theories that often identify their communities as sources of social pathology. Yosso (2005) points out that this kind of deficit thinking is the most prevalent

form of racism within American academic research. What is considered lacking among communities of color are those factors most commonly found among Whites, such as two biological parent households, single-family housing units, independent nuclear families, and particular types and levels of formal education (sometimes referred to as human or cultural capital). SDT, with its long tradition of relying heavily on quantitative methods and Census data, does not take into consideration the social environment of people of color from a perspective that incorporates the indigenous understanding of the problems they face or how to best handle them. More extensive research using qualitative methods must be conducted in order to a) lay the groundwork to create valid measures to be used in survey-based research, and b) have a richer interpretation of survey results. Other approaches, such as methods in community-based participatory research, may also work best to uncover the opinions and understandings of those we seek to study (Israel, Eng, Schulz, & Parker, 2005). Many of the most commonly used constructs are really proxies for underpinning processes that are rarely named or revealed (e.g., adult supervision and guidance, access to material and social resources, and the strength and breadth of social support), which may prove to play a strong role in youth violence.

Fourth, one must point out that both Latinos and African Americans have persistently lived in communities with high degrees of residential segregation and poverty (Blauner, 1969; Wilson, 1987; Massey, 2001). Although most ethnic groups who migrated to the United States initially settled into high poverty areas (e.g., Italians, Jews, and Irish), their stay was temporary. According to the theories of internal colonialism and segmented assimilation, many African American and Latinos have not left poor, inner

city neighborhoods due to larger political and social influences that constrain their movement (Blauner, 1969; Pedraza, 1996; Betancur, 1996; Zhou, 1997).

Finally, social disorganization theory, like social control and social cognitive theories (discussed in the next section) have been developed as gender-neutral. That is, factors identified to be associated with violence are thought to work for both males and females. (One must note that the vast majority of the literature posits females as the victims, rather than the perpetrators of violence; leaving a serious gap in understanding not only females' use of violence, but also males' vulnerabilities to victimization [Sommers & Baskin, 1994; Daigle, Cullen, & Wright, 2007; Ness, 2004]). Although there is some debate as to whether specific individual, family, and community factors work in similar ways for both genders (Hart, O'Toole, Price-Sharps, & Shaffer, 2007; Daigle, Cullen & Wright, 2007), Ness (2004) ethnographic study of poor, violent, inner-city females suggests that they view society as having abandoned them through defective schools and institutions, and discrimination, that make it virtually impossible to enter the legal job market. Anderson (1999) and Bourgois (1996) identified similar sentiments among violent males in poor, inner cities.

In support of SDT, McNulty and Bellair (2003a, 2003b) acknowledge the role of social context in violent outcomes. However, their concept of social context is based on the view of community level disadvantages such as "diminished family well-being, weak family, school, and neighborhood attachments, involvement in gangs, and exposure to violence". Beyond the choice of words in describing "disadvantaged" communities, this way of thinking raises questions regarding the definition of weak neighborhood attachments or family well-being. This implies that these "criminogenic" environments

need to be contained and those who reside in such are to blame for their condition. It suggests that high residential turnover is due to residents not really having a sense of belonging to their neighborhoods, and that the choice of “family disruption” is independent from the structural conditions of poverty *and* social networks embedded in communities.

Of critical importance is the examination of the broad use in the literature of female-headed households as a category of social disorganization. This practice does not consider indigenous kin and fictive kin dynamics or their impact in socio-moral development, nor the role and strength of communities of women who bear the brunt of childrearing. The idea of a male bread-winner, and thus the inappropriateness of a “female-headed household,” is rooted in both patriarchy and capitalism and limits the work opportunities of women (Safa, 1996), consequently having a major impact in their ability to provide for their families. Furthermore, it is at the root of differential earnings for men and women in the labor force, effectively pushing women’s work to a second tier. Consequently, adolescents who live with single mothers are more likely to live in or near poverty, exacerbating the need to reside with or near other kin and fictive kin who may supplement income, social support, and nurturance through child care. It is the marginalization of women in the labor force that makes the category “female-headed households” into an indicator of socioeconomic status. Although these measures do indeed reflect economic circumstances, we must consider alternate measures to uncover the specific pathways of economic indicators on violent behaviors. Furthermore, when considering Latinos, one must bear in mind that current notions of traditional Latino

families and the imposing presence of a “male/macho” as the “head,” are not consistent with evidence from Latin America.

Anthropological work during the 20th century has uncovered profound differences across the continent in the ways in which households are formed and who is a member. In many instances women are at the center of the household, while others, especially adult men, serve as temporary members who may reside in multiple households (González, 1984; Wilson, 1969). This notion of male dominance within the family unit was forced onto the colonized peoples of Latin America whose gender roles were more equitable prior to the violent encounter with European traditions. These processes also created several types of masculinity and femininity ideals (Safa, 1996). Thus, it is likely that resources for childrearing were not directly linked to a male’s ability to secure resources for his partner and offspring. Uncritical use of such family structure/household composition categories and the assumptions about gender roles reinforces the perception of urban Latino and African American communities as pathological and incapable of rearing productive members of society.

Using the Add Health data, McNulty and Bellair’s (2003a) definition of family structure does not include the presence of extended or fictive kin in the household, only two-parent nuclear family and single parent families. Measures of family attachment only include an assessment of the relationship between adolescents and their parents. School achievement included grades in four core classes, yet their analysis does not question the racial and gender inequality in educational achievement in this country. In a separate study they defined concentrated disadvantage at the community level as a composite score of the proportion of the persons living under the poverty line, the proportion of

unemployed civilians over 16, the proportion of female-headed households, and the proportion of population who is Black (McNulty & Bellair, 2003b). Such a definition allows for potentially racist and sexist interpretations of the underlying message. The first and second indicators describe economic and labor market participation, which have systematically discriminated against people of color – particularly men. The third and fourth indicators imply that White men are needed for a community to be organized because unmarried women cannot control their children, and African Americans are a problem population. The authors did not specify why these are included other than its consistency with previous research.

Uncritical use of these categories has fostered the continual characterization of communities of color as lacking appropriate social structures and interactions. At the same time, McNulty and Bellair have been strong advocates against individual-based theories based on medical models (e.g., IQ, twin, family tree, and generational studies), which imply a genetic basis for racial differences and do not explore the social context of the environment in the development of behavior (McNulty & Bellair, 2005). Despite this, the authors' conceptualization of healthy communities lacks a critical examination of their interpretations or an explicit link to the larger, macro social processes, which limits the understanding of violence among youth of color. Future research should rethink what is a source of disadvantage and deprivation and use more accurate definitions that represent different adaptational processes in the face of social and economic marginalization, making sure that measures include ways to tap these dimensions.

With this in mind, a clear distinction must be made between families and households. A household is an empirically measurable unit where people share resources

and perform certain tasks. They vary greatly in composition and relation to resources. Families, on the other hand, are more complex and fluid. The term refers to both nuclear families (parents and their children) and the greater network of relationships acquired through birth and marriage (Rudd, 1991; Jelin, 1991). In some cases, families include people who by virtue of close friendships become fictive kin (Stack, 1974). In Latin America, as in the U.S., families differ widely by class and ethnic groups in their degree of participation in the household unit. The literature describes households as women-centered spaces across groups. The extent to which men are present varies according to class and must be considered within the reproduction of material resources and generations (Jelin, 1991). In many instances, although biological fathers may not be present in the households, they may be a part of the greater family network. Furthermore, males from the mothers' original kin groups (e.g., brothers, cousins, and fathers) may serve as a present father figure to adolescents (Rapp, 1991). More research is needed that looks at the contribution of non-father male kin to childrearing.

Families

The role of families in child and adolescents' development has long been explored in the social and behavioral sciences literature. Values and norms are reproduced across generations and learned through socialization processes that are adaptive to the larger sociocultural environment. In the following section (and subheadings), I will discuss family characteristics linked to youth violence and highlight their role among Latino

adolescents' violent behaviors. This is followed by a review of cultural and structural⁵ characteristics of Latino families that may protect youths.

Families are thought to be the basic unit responsible for socialization, control and supervision of children and adolescents (Loeber & Hay, 1997; Loeber & Stouthamer-Loeber, 1986). Theories addressing the development of violent behaviors underscore the role of family environment in their acquisition and there is wide consensus that families mediate the link between community and adolescents' behaviors (Lynch & Cicchetti, 2002; Margolin & Gordis, 2000; Dishon & Kavanaugh, 2003; Gorman-Smith, Tolan, & Henry, 2000; Hawkins, Laub, & Laurenstein, 1998; Lipsey & Derzon, 1998).

Adolescents learn norms, values, and behaviors from other (presumably adult) members in their household unit and greater family networks. The central premise of Social Control Theory is that individuals are naturally inclined towards deviance and it is the person's attachment to other individuals or groups that make him or her conform to specific norms of appropriate behaviors (Gottfredson & Hirschi, 1990; Smith & Krohn, 1995). Dahlberg (1998) describes family factors influencing adolescents' aggression, violence, and delinquency as those related to a) the quality of the relationship between parent and child (i.e., emotional attachment); b) parental problem behaviors (e.g., criminal activities, drug or alcohol abuse) and parenting practices (e.g., supervising, monitoring); and c) overall family functioning (e.g., communication, cohesion, family conflict/violence).

⁵ Structural factors at the family level refer to those related to family socioeconomic status/class resources and demographic composition within the family and neighborhoods. These are distinct from structures at the larger social level, which refer to a group's position in regards to economic well-being and residential segregation.

When exploring gender, families, and violence, the vast majority of the literature on females and violence conflates the social construction of gender with biological sex, and primarily focuses on women as victims. Some researchers have included in their analysis women as perpetrators of family violence, usually in retaliation for a previous victimization (Sommers & Baskin, 1994) and child abuse (Dukewich, Borkowski, & Whitman, 1996). Stefeinmeier and colleagues (2005) argue that the type of violence that females tend to engage in is more likely to happen in the household or school setting. They point out that, in the case of violence in the family, the sex gap in violent behaviors is quite narrow. Males on the other hand, tend to engage in more severe forms of violence in public spaces, putting them at the center of the “moral panic” over youth violence since the 1970s (Welch, Price, & Yankey, 2002). This may be influenced by what Bourgois (1996) has referred to as “the search for respect” for some males in poor, urban environments, who make a point of being violent in plain sight as a way to gain status. Studies have begun to look at females’ use of violence outside the domestic arena and most have been qualitative assessments of the problem (Ness, 2004; Moore, 2007; Sommers & Baskin, 1994). Ness (2004) found that among adolescent girls in Philadelphia there were intergenerational patterns of violence, where African American and Latina girls learned how to gain respect and status through violence from their own mothers. However, these girls were less likely to carry and use firearms, and thus less likely to be subject to police and judicial interventions. Moore (2007) also found that among both male and female violent youths, the urge to retaliate when one felt disrespected was learned through contacts with adults in their own family circles. However, these youths asserted that although males should be aggressive in order to get

status, females should only do so when they had a special reason to do so. These studies have provided great insight into the lives of violent females, but do little to identify the distribution of violence among racial/ethnic subgroups of females.

In a study of risk and protective factors for delinquent behaviors among primarily Latino (74%) male and female adolescents in central California, Hart and colleagues (2007) found that of all the family-relational variables only parental demandingness was a good predictor of violent and non-violent delinquency among females. Among males both parental demandingness and responsiveness were significant predictors. Using the Add Health data, Daigle and colleagues (2007) looked at predictors of overall delinquency, and violent and non-violent delinquency separately across genders, and found that parental conflict was only relevant for males' overall delinquency. It is still unclear whether different family factors affect girls, or how may this differ from boys across different racial/ethnic groups.

As with community factors, what is considered and defined as *important* social constructs furthers images of families of color as pathological. Most of the literature presumes that two-biological-parent nuclear families are the ideal parental situations for healthy adolescents' development. Media images of healthy, normal families rarely present any variation to this arrangement, despite these families reflect a rapidly declining sector of the population. With increases in rates of children living with cohabiting parents and extended kin among Whites and the consistent findings of higher rates of different family types among people of color, an important question is whether these ideas are fair and applicable to families in a new social era. The emphasis on such a narrow path to socialization implies that those who do not follow the traditional

structures are somehow morally inferior, undeserving of protection, and institutionalized aid. Individualistic values within capitalist ideologies move us away from engaging in meaningful support to families that would greatly benefit adolescents.

Highlighting Latino Families

Culture, Latino Families, and Youth Violence

Differential outcomes in violent behaviors among immigrant children and adolescents may stem from a number of factors related to overall adaptation into American society (Boutakidis, Guerra, & Soriano, 2006). Cultural assimilation – or acculturation – has been the primary focus of research on the cultural elements regarding violence and other outcomes among Latinos (Hunt, Schneider, & Comer, 2004). Boutakidis and colleagues describe this process as an ongoing adjustment to the social and cultural differences between one’s native and host societies. Berry (1995) describes four types of acculturation outcomes: assimilation, biculturalism, separatist, and marginal. In the first, individuals’ reject their native culture and adopt the host culture. Bicultural individuals are able to maintain their native culture, while at the same time embracing the host culture. Separatists are those who completely reject the host culture in favor for their native one. Finally, those who are not connected to either their native or host culture, are described as marginal. However, it is important to consider what aspects of culture do change and become more “Americanized”. Hunt, Schneider, and Comer (2004) point out that it is hasty to label things as cultural changes without a clear understanding of what immigrants are changing *from* and *into*.

Much of this literature assumes that native Latino cultures are less violent than American culture. Although the U.S. has among the highest rates of morbidity and mortality due to violence in the industrialized world, the rates of violence are also extremely high in Latin American countries, including Mexico and Puerto Rico (Dahlberg & Krug, 2002). A more thorough exploration of violence within sending countries is needed to make claims about cultural changes. However, for the purpose of this analysis I focus my discussion of culture as it is reproduced within the household and extended family. I borrow from Lomnitz and Pérez-Lizaur who conceptualized family as a “cultural category implying a set of norms governing expected behavior between kin and, as part of the grammar of behavior, reinforcing the economic, social and ritual aspects of solidarity. Such behavior is grounded in repeated acts of exchange and is reflected in an ideology shaped by the values and beliefs of the kin group and its members” (1991; 123). The following section delves further into the literature exploring culture within Latino families in the United States.

There is considerable theoretical work that describes the importance of family among Latinos and the great influence that attachment to family members has in adolescents’ behavioral and academic outcomes among this group, which in turn have been consistently linked to violent behaviors (Franke, 2000; Kaufman, 2005; Flores 2000; Vázquez García, García Coll, Erkut, Alarcón, & Tropp, 2000; Vargas & Busch-Rossangel, 2000). In a study of delinquency and family among Latino, African American, and White adolescent males, Smith and Krohn (1995) found that family environment as a whole (measured as parent-child attachment and involvement, parental control, economic hardship, and single-parent families), was a more important protective influence for

Latinos than for African Americans or Whites. Linking these to larger processes, Mirabal-Colón and Vélez (2006) stress that risk factors are similar across racial and ethnic subgroups and outcomes differ because of macro structural inequalities. They argue that sociocultural factors reproduced at the proximate level, such as in the family, may protect Latinos from higher rates of violence compared to African Americans even though both show low socioeconomic profiles.

Familism is thought to exert a protective effect on adolescents' behaviors.

Referring to Puerto Ricans, Zayas and Palleja (1988: 262) define this value as one that “supports family integrity and gives shape and direction of conduct among members... reflects the importance given to the family, both nuclear and extended...[and] influences the members conduct not only within the family but in their public behaviors as well.”

Landale and colleagues (2006) describe *familism* as a multidimensional characteristic that shows “strong commitment to family life... [and] entails the subordination of individual interests to those of the family group,” and is instilled across generations to some extent or another (147). This value is consistent with others who point out that in the face of socially subordinate minority status and greater exposure to community stressors, many families of color develop adaptive strategies and different socialization goals, such as interdependence and bilateral/extended kin networks (Harrison et al., 1990) as a way to cope with persistent inequality and discrimination in the greater social environment.

Households that include extended kin have been found to vary widely by country and social class in Latin American countries (Jelin, 1991). These families are focused on instilling in children a positive identification with their racial and/or ethnic group, protecting them from harsh social environments, and guiding adolescents through the

processes of identity formation common to this stage. Harrison and colleagues (1990) have identified four adaptive strategies and socialization goals key among minorities in the U.S.: family extendedness, role flexibility, biculturalism, and ancestral worldviews. However, characteristics found among people of color have been shunned in the literature as suboptimal for adolescents' healthy development (McNulty & Bellair, 2003a).

There is very little theoretical and empirical research that explores the diversity of Latino families and how these relate to youth violence. Such a gap in the literature hinders the development of effective intervention strategies across levels of the ecological framework. In the following section I discuss cultural values identified in the Latino family literature as major contributors to adolescents' socialization and behavioral outcomes. In doing so, I will review factors that have been specifically suggested as determinants of youths' violent behaviors. Following that, I will describe important structural characteristics that have been linked to youth violence among Latino families and, wherever possible highlight their diversity by national/ethnic origin and generation.

The relationship between cultural factors and violent behaviors is not well understood. Flores (2000; 5) defines culture as "a set of values, beliefs, and thoughts embodied in a musical score of language, customs, products, art, and music that creates interactions among a group that by its very nature changes in time." Overall, research has been very limited in the study of cultural differences by ethnic or generational groups. Most of the literature on Latino families agrees that this population can be broadly described as collectivistic - a trait viewed as protective against the development of youth violence. A collectivistic worldview stresses the provision of needs and goals for the group, which are often at the expense of an individual's needs or desires (Boutakidis,

Guerra, & Soriano, 2006; Mirabal-Colón & Vélez, 2006). Collectivism among Latinos is expressed in the concepts of *la familia* and *familism*, which, as previously stated, stress the role of family as being the center of one's life, directly affecting the relationships of individuals within it, and members' behaviors when interacting with others (Mirabal-Colón & Vélez, 2006; Zayas & Palreja, 1988). Most *familism* definitions emphasize the importance of unity and adherence to particular gender roles in public situations (Ingoldsby, 1991; Vega, 1990; Zayas & Palreja, 1988).

Landale, Oropesa and Bradatan (2006) identified three dimensions of *familism* among Latinos: attitudinal foundations (values that emphasize the centrality of family), behavioral manifestations (fulfillment of obligations and roles), and family demography (size and structure, including extended and fictive kin). It is important to remember the extensive ethnographic evidence on the existence and key role of extended and fictive kin, who may or may not live in the same households, in the United States and Latin America (Flores, 2000; González, 1984). These alternate systems of support have been suggested to protect youth from negative outcomes by providing a problem solving and stress coping system that makes resources available to aid in both transitional and crisis situations (Harrison et al., 1990). This may play a protective role through additional adults establishing parent-like relationship with adolescents (through supervision, control, and emotional support), as well as relationships with peers within the extended family who can buffer the influence of outside peers. By the same token, the influence of family peers who are violent may increase the risk of the adolescents' use of violence. Extended kin systems strengthen groups as a central element of youths' personal identity, heightening the significance of rules, responsibilities, and emotional attachments.

According to Flores (2000) *familism* among Latinos transcends national boundaries, exhibiting a fundamental similarity. However, the sub-ethnic differences depend on the dimension of *familism* measured (Carlos & Sellers, 1972; Tienda, 1980; Landale, Oropesa, & Bradatan, 2006). *Respeto* and *simpatía*, two cultural constructs closely related to *familism*, stress the great value and distinction paid to authority figures and the discouragement of interpersonal conflict (Mirabal-Colón & Vélez, 2006), encouraging people to behave in ways that keep harmonious relationships. Unfortunately, there is little empirical evidence on the association of such elements and adolescents' violent behaviors. In one of the few studies looking at acculturation (language, ethnic relations, and media preference) and attitudinal *familism* (sense of family obligation, support, and use as social referent) among Puerto Ricans in the Midwest, Rodríguez and Kosloski (1998) found that even though increases in acculturation changed the use of family as a social referent, factors related to family systems and support continued. These findings are consistent with previous work (Sabogal et al., 1987) and suggest that although acculturation leads to changes in certain family characteristics (such as increases in female labor force participation, and divorce rates), Latinos do not surrender this cultural value (Vázquez García et al., 2000). Some research has examined whether it serves as a protective influence against youth risk behaviors. In a study of attitudinal *familism* (importance of parents, other relatives, and elders in adolescents' decision-making), acculturation, and drug use among White and Latino adolescents living in Southwestern states, Ramírez and colleagues (2004) found that although positive family relations and parental monitoring were strongly associated with less drug use, attitudinal

familism did not have a protective effect. They did not examine the role of gender roles in this study.

Based on the literature reviewed, it is difficult to say whether the assumed protective effect of *familism* on youth violence really applies or under which conditions. Although it is clear that ethnic minority youth undergo a process of adaptation into the American mainstream, it is unclear whether these processes include changes of fundamental attitudes, values, and beliefs or the implications of such changes for youth's violent behavior. Proxies of acculturation, such as language preference and generation, do not identify core values nor are they good indicators of potential changes in them. In public health, shallow concepts of culture and processes of acculturation generally assume those we study are native, primitive, and natural. Immigrant groups are viewed as in direct opposition to Western culture.

Hunt, Schneider, and Comer (2004) argue that many of the traits under study exist among both Whites and Latinos, making their label as traditional-Latino somewhat arbitrary. *Familism* and conventional gender norms are based on a morality that is labeled as opposite to "modern, mainstream" characteristics. Further, the authors guard against conflating the processes of acculturation with those of immigration and socioeconomic inequity. With this in mind, available instruments that measure the behavioral and attitudinal dimensions of *familism* need to be used in future research (Lugo-Steidel & Contreras, 2003; Villarreal, Blozis, & Widaman, 2005), and their validity across different Latino ethnicities established. Given the scarcity of such instruments in the short term (until new data can be collected), the general concept must be refined into specific elements already in the literature. Below, I will briefly review some of these key elements

of family dynamics linked to violent behaviors: parenting styles, family bonding, and gender roles.

Parenting style

The role of parenting styles in the acquisition of problem behaviors has been widely debated in the literature on adolescent development (Heerenkohl et al., 2000; Dahlberg, 1998). Much research on parenting practices stems from the theoretical work of Baumrind (1967; 1978; 1991a; 1991b), who described different styles as authoritative, authoritarian, and permissive parenting. She argues that relevant parental characteristics refer to the balance between parental demandingness (control of children's behavior), and responsiveness (involvement in attending to children's emotional and developmental needs). While authoritative parenting balances these two factors, authoritarian parenting places high demands on the child, but is low in parents' emotional responsiveness. Permissive parenting is low in both demandingness and responsiveness. This typology of parenting has been highly critiqued for its incompatibility with the experiences of people of color. Baumrind explicitly stated that her work was based on research with middle-class, White Americans and its applicability to parent-child relationship among minorities should be explored. Jackson and Foshee's (1998) work has shown that minority families are more likely to exhibit authoritarian and permissive parenting than White youth's families. However, further research has shown that difference in parenting style may be more a function of socioeconomic status and the environments in which people live, than race or ethnicity (Jarrett, 1997a; 1997b). Latino and African American families then would be expected to have higher rates of authoritarian parenting because they are

disproportionately represented among the poor, who are more likely to live in violent neighborhoods.

Additionally one must question how much do the dynamics found in middle/upper class, White families are similar to other racial, ethnic, and class groups. In one of the few articles that explored how this general model overlapped with factors identified within the Latino family, Vargas and Busch-Rossnagel (2000) pointed out that Latino parenting styles have characteristics that are common across Baumrind's typology. They argued that parents who required obedience, sometimes through corporal punishment, had better control of adolescents' behaviors. Although these parents primarily demanded conformity from their children, they also exhibited high levels of nurturance. These two elements are closely related to Baumrind's description of parental demandingness and responsiveness, but results suggest that patterns traditionally proposed for White families may not cluster in the same way for Latinos. Rather, like other ethnic minority families, they undergo particular processes of adaptation and socialization. Continued use of typologies developed for White families does little to understand parenting practices for other populations. Thus, they should be adapted to represent more accurate practices among this group.

Family bonding

Levels of functioning and emotional attachment in a family unit are associated with youth violence. Parents (or parental figures) shape adolescents' conduct and secure the transmission of values, thus stressing the importance of parent-child relationships on violent behavior (Pabón, 1998). Low parental connection, family conflict, and hostile

environments have been associated with increased aggression, violent offending, and delinquency among adolescents (Coles, Greene, & Braithwaite, 2002). Family bonding is thought to have a stronger protective effect among Latinos than Whites and African Americans (Rodríguez & Weisburd, 1991; Smith & Krohn, 1995). The extent to which this is true across Latino subgroups is not clear. In a study of delinquency among inner-city Puerto Rican and White male adolescents, Rodríguez and Weisburd found family involvement (measured as time spent with family) to be a highly significant predictor among the former, but not the latter group. In this study, they describe family involvement and normlessness (i.e., the extent to which respondents thought their relationships with family members were governed by conventional norms) as sociocultural values. However, their measurements did not tap into any specific core value. Pabón (1998) found no association between family bonding and delinquent behaviors, and only found a protective effect for time spent with the family. This highlights the importance of understanding how specific aspects of the family dynamics are relevant for different ethnic subgroups.

Gender norms and values

Another element often debated is the influence of culturally sanctioned gender roles on adolescents' behaviors. Much of the research done in the 1980s and 1990s showed a shift in social attitudes, behaviors about gender roles, and female labor participation in the United States. For decades, the literature discussing Latino gender roles invoked rigid notions of male and female behavior and their place in social interactions. *Machismo* is described as a traditional Latino value that involves male

dominance and female subordination and has been used to characterize gender differences in behaviors (Ford, Stevenson, Weiner, & Wait, 2002; Anderson, 1999; Bourgois, 1996). It was originally coined to describe attitudes and behaviors among peasants and lower class Mexicans and Puerto Ricans (Bermúdez, 1955; Stycos, 1958), and later other Latin American men. Empirical studies have not been able to show whether it has a direct effect on youth's violent behaviors.

The term *machismo* is usually associated with different attitudes and behaviors, such as aggressiveness, oppression, narcissism, insecurity, thus casting a distinctly negative ethnocentric and classist view on Latino men. Ramírez (1999) notes that although the term also includes positive traits, such as responsibility, perseverance, valor, and the protection of family; these are rarely talked about in the literature. Further, he notes that previous work has superficially approached the topic either by labeling it as a syndrome with a set of destructive, pathological attitudes or from a limited sociocultural perspective that incorporates the asymmetry of gender dynamics in patriarchal societies (Ramírez, 1999).

It should be noted that the vast majority of the literature that investigates *machismo* has focused on the construct as it relates to sexual identity, attitudes, and behaviors (Ramírez, 1999; Ramírez, García Toro, & Cunningham, 2002; Mejía Ricart, 1975), although one must question if the findings are exclusive to Latino men or are shared by other racial/ethnic groups in patriarchal societies around the globe. Issues of masculinity and machismo, as they pertain to violent or delinquent behaviors, are mentioned in the literature, but theorizing in this area has lagged far behind (for exceptions see Bourgois, 1996; Anderson, 1999).

There is limited information that examines gender dynamics as potential markers for sex differences in youth violent behaviors (there is on the other hand a considerable amount of research that looks at gender dynamics as predictors for gender-based violence, such as intimate partner violence). Ascencio (1999:109) notes: “A male may exert power and control through the use of physical violence. Physical verbal aggression is seen as a legitimate tool expression of manliness. ... *Machismo* also involves a sense of invulnerability, courage, and honor. It may be linked with concepts of respect and dignity. Macho males also venerate their mothers and feel a sense of obligation to protect and provide for their families.” Many have argued that *machismo* dictates these appropriate behavioral scripts for males, such as aggressiveness and hypersexuality (Ingoldsby, 1991; Zayas & Palreja, 1990), but the above definition proposes that a strong sense of *familism* may coexist with *machismo*. The question remains whether they work in the same direction, opposite each other, or in interaction. Consistent with Goffman’s (1983) interaction theory, which proposes that people aim to control others’ perceptions of themselves, Ford and colleagues (2002) propose that gender norms contribute to the regulation of delinquent behavior by serving as self-guides that inhibit gender-inconsistent behaviors.

Connell’s proposition of a hegemonic masculinity ideal sheds some light on these processes. Hegemonic in this case refers to the “social ascendancy achieved in the play of social forces that extends beyond the contests of brute power into the organization of private life and cultural processes” (1987: p184). He described that the search for power vis-à-vis other men characterizes hegemonic masculinity, in many instances using aggression to exert it. Ethnographic research has found evidence that supports this

process. Bourgois (1996) and Anderson (1999) describe young men's use of violence as a way to gain the respect and admiration of peers. In a study of gender and violence among Puerto Rican adolescents, Ascencio (1999) found respondents justified the use of violence by those considered to be "machos". Guerra and Williams (2006) also suggested that violence may be used to show a sense of toughness, accomplishment, and achievement in order to gain a space of dominance within the local social hierarchy. Future data collection efforts should more thoroughly explore issues of "masculinity" and "femininity" understanding that these are ever-changing concepts within different contexts. Furthermore, quantitative studies should include measures that assess agreement with traditional gender norms as locally defined, as well as conformity to gender-sanctioned behaviors and their influence on violent behaviors and attitudes.

In one of the few studies that examined street violence among females, Ness (2004) followed approximately 100 African American (75%), Latina (20%), and White (5%) girls in West and Northeast Philadelphia for a year, to understand the processes of "how low-income female adolescents experience causing physical harm and the meaning they assign to doing so" (33). Her analysis emphasized the need to contextualize girls' violence at multiple levels, and warns readers that perceptions of menace affect perceptions of female's violence. For example, because females are much less likely to carry firearms and other weapons their use of violence is less publicized or less likely to be included in official crime statistics. However, Ness not only found the experience of violence among girls in her sample commonplace; but also, it was clear that respondents own disbelief of work possibilities in the legal market, coupled with outsiders' view of poor females as "ghetto", greatly reduced any incentive they had in assuring their

behavior did not break any laws. This was particularly acute among African Americans and Latinas. Ness argues that fighting among this sample was a way to enhance their identity and begin their ascendance into adulthood. Even in cases where they did not win, being a good fighter provided them with a status, respect, and strengthened relationships with peers. Interestingly, notions of femininity do not differ greatly from the mainstream, but rather its fluidity incorporates the need to “stand up for oneself”. In fact, Ness found that one of the primary reasons girls fight is over boys. In relationship with boys they assume traditional “feminine” roles by spending a lot of time on their appearance, prioritizing partners’ interests, and becoming their caretaker (Ness, 2004). The extent to which social class is the primary determinant of the differences in violent behaviors across racial/ethnic groups of females is still to be determined. To my knowledge, studies have not examined variations of females’ behaviors across Latino national subgroups, nor carried out a systematic analysis of gender differences within various Latino subgroups. Understanding the distribution of youth violence is important for the creation of effective policy and intervention strategies that would better serve the communities and youths engaging in violence (Peterson, Esbense, Taylor, & Freng, 2007).

Structural Characteristics of Latino Families

Structural factors in families are those related to the economic and spatial assimilation of families. Household composition is considered by some to be a structural factor, while for others it is a critical dimension of *familism*. As previously stated the Latino category includes heterogeneous groups of people who are by birth or ancestry of Latin American origin. Many of these families have been in the United States for more

than five generations (particularly Mexicans) and continue to receive large numbers of immigrants. This complexity makes any general statements about Latinos as a pan-ethnic group questionable, as it assumes common experiences that may not be supported by empirical evidence. In spite of rapid demographic changes in the overall population composition, Mexicans, Puerto Ricans, and Cubans continue to be the largest ethnic subgroups in the country. Increases in the numbers of Central and South Americans during the previous decade signal the importance of continued attention to this population. Wherever possible I specify the ethnicity and generation of the sample participants.

Family structure

Landale, Oropesa, and Bradatan (2006) identified family structure (i.e., head of household, number of persons in the home, presence of extended family in the home and neighborhoods) as an important indicator of family life among Latinos that speaks to the dynamics between structural and cultural forces. Table 2.2 shows substantial differences in family factors associated with youth violence across subgroups by generation. In all generations, Cubans are more likely to live in married households than Mexican or Puerto Ricans. For Puerto Ricans, the rates are comparable to African Americans. Puerto Ricans are more likely to live in cohabiting households than the other two Latino groups. Among Mexicans, later generations have higher rates of female-headed households, whereas the opposite is true for Cubans. Puerto Ricans' rates remain fairly constant and much higher than the two other groups'. All Latino groups and African Americans are more likely to live in households with extended kin, compared to Whites. Among Mexicans and Puerto

Ricans the trend is a decrease in extended households in later generations, whereas the opposite is true among Cubans. McNulty and Bellair (2003a) have argued that any deviation from two-biological parent family units provide a suboptimal socialization environment for children and adolescents, thus increasing the likelihood of developing problem behaviors. I disagree with such a severe position that assumes a simplistic view of family processes and attachments and disregards the context in which other families types (including the presence of extended and fictive kin) may serve as protective factors.

Household composition is an important part of adolescents' environment. In a study of risk-behaviors, Blum and colleagues (2000) found those living in single parent families had higher risks of weapon-related violence. Structure may impact the risk for violence by restricting family resources, and the number of people available to supervise and monitor youths. Given these dramatic differences in household characteristics, especially married and female-headed households, we might expect differences in rates of violent behaviors across Latino groups. Table 2.3 shows the distribution of living arrangements by age-group, race, and ethnicity and incorporates different indicators of family life for 0-17 and 18 to 24 year olds. Like African Americans, Puerto Rican children have a much higher probability of living with a single mother than Whites, Mexicans, or Cubans. However, Landale and colleagues did not include within their categories a single-parent living with other relatives, which may include a significant number of single-parent families in their sample. Puerto Ricans and African Americans are also more likely to live with only fathers or other relatives compared to Whites and Mexicans. Cubans have a similar rate of living with other relatives as Puerto Ricans.

Table 2.2. Family Household Characteristics by Race, Ethnicity, and Generation, Pooled 1998-2002

Household	Mexican	Puerto Rican	Cuban	White	African American
Percentage Married Couple					
All family households	69.0	53.1	75.2	79.5	46.3
1 st Generation	72.4	56.9	74.7		
2 nd Generation	64.7	48.1	80.9		
3 rd + Generation	64.8	47.6	†	79.3	45.8
Percentage Cohabiting Couples					
All family households	5.9	7.4	4.0	5.1	5.7
1 st Generation	5.0	5.7	3.6		
2 nd Generation	6.0	10.1	4.2		
3 rd + Generation	7.5	8.6	†	5.3	5.6
Percentage Female Headed Household, no partner					
All family households	18.2	33.5	15.8	11.4	41.4
1 st Generation	14.8	32.4	16.9		
2 nd Generation	22.6	34.4	8.8		
3 rd + Generation	22.1	36.6	†	11.4	42.2
Mean number of persons in household					
All family households	4.0	3.4	3.1	3.0	3.3
1 st Generation	4.4	3.3	3.1		
2 nd Generation	3.6	3.5	3.3		
3 rd + Generation	3.6	3.4	†	3.0	3.3
Percentage extended family households					
All family households	8.4	7.2	6.5	2.6	7.2
1 st Generation	9.6	8.7	6.3		
2 nd Generation	7.8	5.6	8.9		
3 rd + Generation	6.5	4.4	†	2.5	7.0
Poverty Rates of families with children 0-17*					
All family households**					
1 st Generation	0.426	0.536	0.312		
2 nd Generation	0.342	0.363	0.178		
3 rd + Generation	0.268	0.356	0.044	0.106	0.353

Source: Landale, Oropesa, and Bradatan (2006), Pooled March 1998-2002 CPS Files.

*Source: Reimers (2006), Pooled March 1998-2002 CPS Files. †Samples had less than 200 cases. **Not reported.

Table 2.3. Living Arrangement by Age Interval and Ethnicity, Pooled 1998-2002

Living Arrangements	Mexicans	Puerto Ricans	Cubans	Whites	African Americans
Ages 0-17					
Both parents	67.2	42.4	69.5	76.8	36.9
Mother only	22.8	45.6	21.9	16.0	49.4
Father only	4.4	5.0	2.7	4.4	4.5
Other relatives	3.7	4.4	4.1	1.7	7.4
Non-relatives	1.5	2.0	1.3	0.9	1.6
Ages 18-24					
Family householder	19.1	23.3	10.1	16.4	19.8
Spouse/partner of householder	12.6	10.1	12.4	10.5	5.3
Child of householder	40.1	48.4	62.1	54.1	51.9
Other relatives	16.8	9.3	9.3	4.3	12.2
Alone	2.0	2.7	3.7	5.3	5.5
Non-relatives	9.5	6.3	2.4	9.4	5.3

Source: Landale, Oropesa, & Bradatan (2006), Pooled March 1998-2002 CPS Files.

Family class resources

Family socioeconomic position has been conceptualized and measured in many ways, the most common being single or combined household income, and parental education. This factor is likely to influence violent behavior in two ways: through the type of neighborhood the family is able to reside in, and parents' ability to garner resources that foster positive learning environments, as well as their ability to deal with financial pressures. In a recent assessment of Latinos in the United States (supported by the National Research Council), Reimers (2006) described the economic well-being of different regional and national groups. She argues that relative educational levels and family structure (primarily family size) were major determinants of economic well-being

across all Latino ethnicities. While poverty *per se* should not be seen as a direct precursor to adolescents' violent behavior, poor families are more likely to live under multiple stressors, such as being preoccupied with resources for transitional and crisis situations, and being more likely to live in poor neighborhoods, and thus have greater exposure to multiple risk factors. Parents in poor families are also more likely to belong to an unsteady labor market that precludes them from controlling their own work hours and maximizing time with their children. This means it is more likely that they rely on family arrangements and resources that are not widely examined in the youth violence literature (e.g., extended and fictive kin living and child care arrangements, pooled extended family resources).

Reimers found a non-white phenotype to be a significant predictor of decreased economic well-being. This suggests that race, ethnicity, and generation may be important contributors to within-Latino differences in youth violence. Table 2.4 shows a dramatic increase in household income and per capita income between first and second generation for Mexicans, Puerto Ricans, and Cubans and a plateau between the second and third generations. Mexicans and Puerto Ricans have substantially lower incomes than Cubans and Whites across generations. However, Mexicans' total household income by the third generation is higher than Puerto Ricans and African Americans. There are no significant differences in per capita income. The pattern of ethnicity/economic well-being holds for several indicators, with Mexicans and Puerto Ricans being at the bottom of the socioeconomic ladder. This suggests that not all Latino groups go through the same pathways to economic assimilation. Focused on households with children and/or adolescents, Reimers also points out that poverty is particularly high among Latino

children and adolescents. Results in Table 2.2 show that all first generation Latino children have higher poverty rates than Whites and African Americans. In the second generation, Mexicans and Puerto Ricans are similar to African Americans; while Cubans fall between these groups and Whites. By the third generation, Puerto Ricans and African Americans have similar rates, followed by Mexicans, while Cubans have lower rates of poverty than Whites (Reimers, 2006).

Table 2.4. Median Real Annual Income and Per Capita Income of Households in 2002 Dollars, 1997-2001 Pooled

National Origin	Generation		
	1st	2nd	3rd
	Foreign-born	U.S.-born, with Foreign-born parents	U.S.-born, with U.S.-born parents
2002 Medial Total Household Income			
Mexican	\$29,799	\$40,676	\$39,306
Puerto Rican	27,592	36,989	35,553
Cuban	39,733	62,545	-----
All Latinos	31,470	40,505	39,903
African Americans			31,775
Whites			54,752
2002 Median Per Capita Income			
Mexican	\$7,775	\$12,994	\$13,312
Puerto Rican	10,308	13,059	13,053
Cuban	14,581	22,678	-----
All Latinos	9,071	13,570	13,901
African Americans			13,388
Whites			22,480

Source: Reimers (2006) Selected groups, using the Pooled March 1998-2002 Current Population Survey (CPS) files, using household weights.

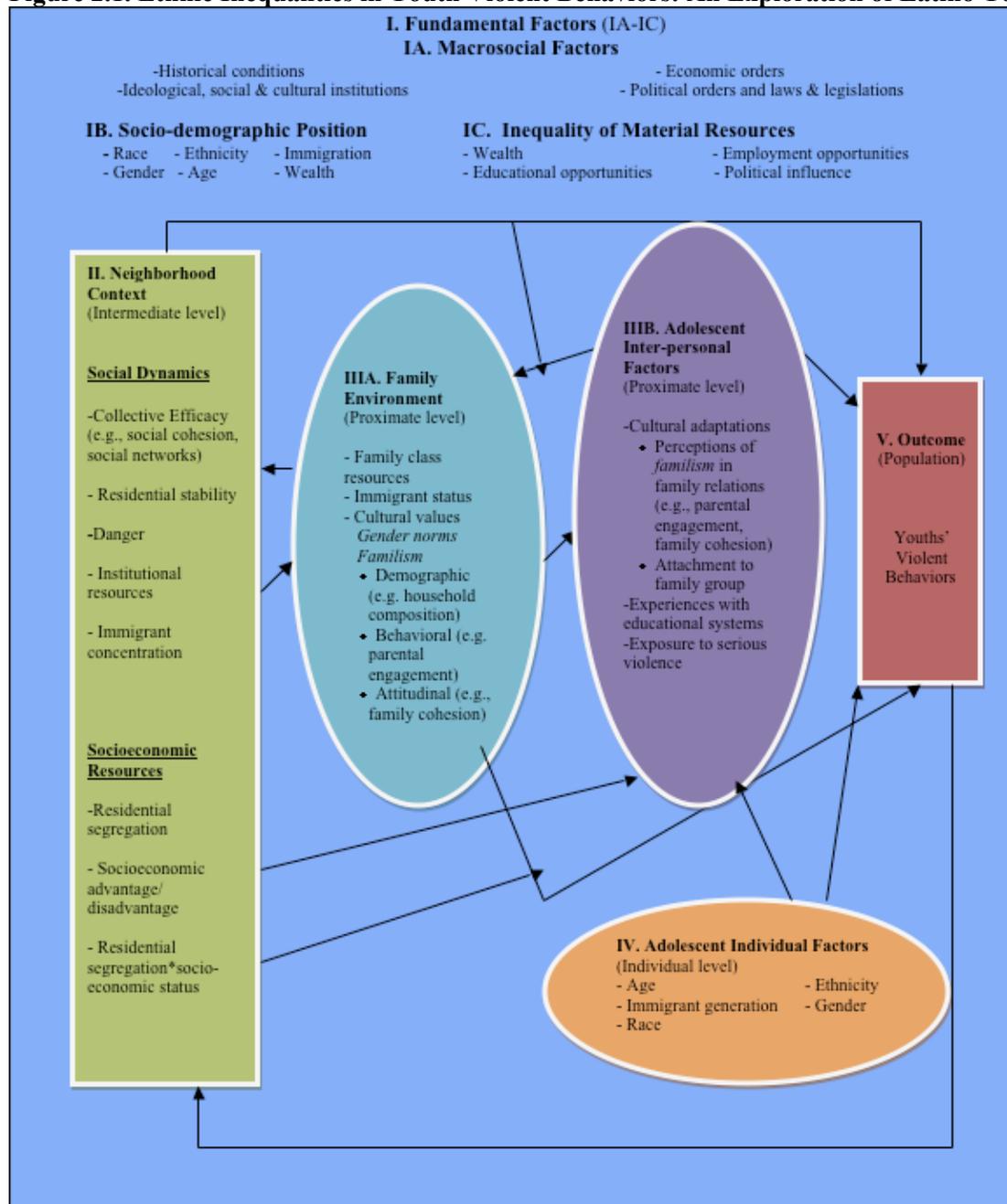
Latino Youth Violence Inequalities: A Conceptual Model

The youth violence literature is not well suited for exploring inequalities across Latino groups. Based on this review, I have developed a conceptual framework that highlights larger social forces to provide a context for understanding community and family environments. Following the organization found in Schulz and Northridge's (2004) model, Figure 2.1 includes fundamental, intermediate, proximal, and individual factors that explain gender, racial, and ethnic patterns of youth violence. It is important to note that my model specifically attempts to explain interpersonal violent behaviors among adolescents that may result in injury or death. It is not an exhaustive list of factors affecting violent behaviors, but rather illustrative of those that may differ by racial and ethnic groups. Although individual level variables (e.g., IQ and hyperactivity) shed light into the processes of why a particular person engages in violence, evidence suggests that theories that emphasize the social context best explain group disparities (Sampson, Morenoff & Raudenbush, 2005; Bruce, 2000; McNulty & Bellair, 2003a, b; Laurenstein & White, 2001; Kaufman, 2005; Peterson & Krivo, 2005; Dahlberg & Krug, 2002).

A basic assumption of this framework is the existence of fundamental factors that shape the experiences of all members of society through a complex interplay of the political, economic, cultural, and social orders throughout history. This level is rarely included in studies of youth violence. Link and Phelan (1996; 2000) defined fundamental factors as those that affect knowledge, money, power, prestige, and social connections, influencing the ability to minimize risks and maximize protective influences. They are patterned through different socio-demographic characteristics, such as race, ethnicity, socioeconomic status, age, and gender, immigration, and citizenship status, and create

inequality of material wealth, employment and education opportunities, and political influence among different populations. These factors are fundamental in that they precede multiple outcomes through different etiologic mechanisms (e.g., exposure, behavioral risk factors).

Figure 2.1. Ethnic Inequalities in Youth Violent Behaviors: An Exploration of Latino Youth



Ecological models imply that individuals live in nested, hierarchical structures and are connected through a web of relationships at all levels. Stokols (1992: 11) proposes that the “social-structural qualities of settings may play an important etiologic role in promoting social cohesion, and physical and emotional well-being among setting members.” In this sense, societies’ priorities and allocation of resources at the macro-social level create and shape different patterns of health and disease outcomes (Link & Phelan, 2000; 1996). Intermediate factors are shaped directly by macro-social factors and indirectly through social relations (Schulz & Northridge, 2004) and speak to the degree of advantage and disadvantage in an individual’s larger environment. In this model, I borrow from Guerra and Williams’ definition of disadvantage, which refers to “variable properties of social spaces or ecological niches that reduce the life chances of people in those settings; that is these niches interfere with the healthy adaptations that facilitate constructive developmental pathways” (2006: 20). Specifically, intermediate factors refer to the shared contexts in which people live and interact with others outside their immediate social groups (i.e., family and friends). The definition of “healthy environments” and “constructive developmental pathways” continues to hold problematic implications, as I have previously discussed.

Proximate factors include those relevant to an individual’s immediate environment, such as family and friends, and characteristics forged in the interplay of these environments. Not all adolescents who live in disadvantaged environments engage in violent behaviors. This highlights important pathways closer to the individual that mediate and moderate the relationship of intermediate structural conditions and violence. The outcome category is conceptualized at the individual level and it aggregates

population level. Focusing on gender, racial and ethnic inequalities, this refers to the differences in rates of youth violent behaviors within and between particular groups. The organization of the model implies that inequalities in variables at the intermediate and proximate levels depend on fundamental factors at the larger social/structural level. In the case of immigrant groups, like Latinos, the segmented assimilation literature points to important subgroup variations of factors at intermediate and proximate levels. This model further includes factors identified as cultural in the Latino family and youth literature. In doing so, it broadens analysis to include the perspectives of people of color and show important strengths and adaptive strategies to minimize the impact of inequities at the macrosocial level.

The feedback loops presented in the model represent the reciprocal influence of factors in the multiple levels of interaction, which allow for the exploration of the mutually constitutive processes of both structural and cultural factors across the levels. To make the model manageable I have not included potential links between factors within each level. This is a drawback of all models that attempt to visually present complex relationships. By the same token, I have not included a discussion of the influences of drug use, gangs, and delinquent peers among Latino adolescents. I do not wish to undermine the importance of these relationships nor their impact on violent behaviors. However, these factors may be consequences of participation in crime and violent behaviors and beg the question of causality (Sampson, Morenoff, & Raudenbush, 2005). Research on these topics may see them as processes that are in part adaptive to environmental circumstances.

Conclusion

In sum, differential processes of assimilation in mainstream American society may lead to inequalities in youth violence across Latino groups, as well as differences when compared to Whites and African Americans. These differences may place specific ethnic subgroups at a continuum of outcomes through their particular experiences with residential segregation and economic mobility that in turn directly and indirectly affect Latino families. However, a number of gaps remain in the current literature on Latinos and youth violence. Guided by the model and the review presented in the previous section, I have identified key gaps that remain unanswered. For example, are there differences in the prevalence of violent behaviors by Latino ethnic groups? How do these compare with Whites and African Americans? Which elements of family and community environments explain the prevalence of youth violence for each racial/ethnic/gender group? Are there differences in the importance family environments play for the different Latino groups? Are important elements considered cultural or structural in nature? Do community factors shape family characteristics? Are elements of family environments and community networks adaptive strategies to inequalities in material resources?

In the following studies, I examine several of the linkages proposed in the conceptual model in Figure 2.1. Specifically, I look to determine the prevalence and relative risk for violent behaviors across different Latino ethnic groups, as well as the direct effects of family environments (i.e., relational and demographic *familism*) on youth violence. Further, I examine the direct and interactive effects of neighborhood factors (i.e., socioeconomic status and racial/ethnic composition) on the risk for violence. In both studies I examine whether these elements have a similar impact on the risk for violence

across different Latino subgroups. As future research examines these questions, it should consider that, as Sampson emphasized, “descriptive facts are at the heart of sound social science, a first step in any causal inquiry” (2008: 30).

References

- Anderson, E. (1999). *Code of the streets: Decency, violence, and moral life in the inner city*. New York, NY: W.W. Norton.
- Ascencio, M.W. (1999). Machos and sluts: Gender, sexuality, and violence among a cohort of Puerto Rican adolescents. *Medical Anthropology Quarterly*, 13(1), 107-126.
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 75, 43-88.
- Baumrind, D. (1978). Parental disciplinary patterns and social competence in children. *Youth and Society*, 9, 239-276.
- Baumrind, D. (1991a). The influence of parenting style on adolescent competence and substance abuse. *Journal of Early Adolescence*, 11, 56-95.
- Baumrind, D. (1991b). Effective parenting during the early adolescent transition. In P.A. Cowan & M. Hetherington (Eds.), *Family Transitions*, (pp.111-163). Hillsdale, NJ: Erlbaum.
- Bellair, P.E., Roscigno, V.J., & McNulty, T.L. (2003). Linking local labor market opportunity to violent adolescent delinquency. *Journal of Research in Crime and Delinquency*, 40(1), 6-33.
- Bermúdez, M.E. (1955). La vida familiar del mexicano. *México y lo mexicano*, 20.
- Betancur, J.J., (1996). The settlement experience of Latinos in Chicago: Segregation, speculation, and the ecology model. *Social Forces*, 74(4), 1299.
- Blauner, R. (1969). Internal Colonialism and ghetto revolt. *Social Problems*, 16, 393-408.
- Blum, R.W., Beuhring, T., Shew, M.L., Bearinger, L.H., et al. (2000). The effects of race/ethnicity, income, and family structure on adolescent risk behaviors. *American Journal of Public Health*, 90(12), 1879.

- Bourgois, P. (1996). In search of respect: Violence, respect, and sexuality among Puerto Rican crack dealers in East Harlem. *The British Journal of Criminology*, 36(3), 412.
- Boutakidis, I., Guerra, N.G., & Soriano, F. (2006). Youth violence, immigration, and acculturation. In N.G. Guerra, & E.P. Smith (Eds.) *Preventing youth violence in a multicultural society*. (pp.75-100) Washington, DC: American Psychological Association.
- Bronfenbrenner, U. (1988). Interacting systems in human development: Research paradigms, present and future. In N Bolger, A Caspi, & M Moorehouse, (Eds.). *Persons in context: Developmental processes*. New York, NY: Cambridge University Press.
- Bruce, M.A. (2000). *Inequality, interactional complexity, and violent delinquency: An exploration of structural, family, and individual considerations*. Discussion Paper no. 1216-00. Retrieved June 17, 2009, from University of Wisconsin-Madison, Institute for Research on Poverty. Web site: <http://www.irp.wisc.edu/publications/dps/dpabs2003.htm#DP1273-03>
- Bruce M.A., & Roscigno V. J. (2003). "Race effects" and conceptual ambiguity in violence research: Bringing inequality back in. In D.F. Hawkins (Ed.). *Violent crime: Assessing race and ethnic differences*. New York, NY: Cambridge University Press.
- Carlos, M.L., & Sellers, L. (1972). Family, kinship structures, and modernization in Latin America. *Latin American Research Review*, 7(2), 95-124.
- Carter-Pokras, O., & Zambrana, R.E. (2001) Latino health status. In M. Aguirre-Molina, C.W. Molina, & R.E. Zambrana, (Eds). *Health Issues in the Latino Community*. San Francisco, CA; Jossey-Bass.
- Centers for Disease Control and Prevention, (2006). Youth risk behavioral surveillance – United States, 2005. *MMWR*, 55 (SS-5).
- Cockerham, W.C. (2005). Healthy lifestyle theory and the convergence of agency and structure. *Journal of Health and Social Behavior*, 46(1), 51-67.

- Coles, C.J., Greene, A.F., & Braithwaite, H.O. (2002). The relationship between personality, anger expression, and perceived family control among incarcerated male juveniles. *Adolescence*, 37(146), 395-409
- Connell, R.W., (1987). *Gender and Power*. Stanford, CA: Stanford University Press.
- Coontz, S. (1992). *The way we never were: American families and the nostalgia trap*. New York, New York: Basic Books.
- Dahlberg, L.L. (1998). Youth violence in the United States: Major trends, risk factors, and prevention approaches. *American Journal of Preventive Medicine*, 14(4), 259-272.
- Dahlberg, L.L., & Krug, E.G., (2002). Violence – A global public health problem. In E.G., Krug, L.L. Dahlberg, J.A. Mercy, A.B. Zwi, & R. Lozano (Eds). *World Report on Violence and Health*. Geneva: World Health Organization.
- Dahlberg, L.L., & Potter, L.B. (2001). Developmental pathways and prevention challenges. *American Journal of Preventive Medicine*, 20(1S), 3-14.
- Daigle, L.E., Cullen, F.T., & Wright, J.P. (2007). Gender differences in the predictors of juvenile delinquency: Assessing the generality-specificity debate. *Youth Violence and Juvenile Justice*, 5(3), 254-286.
- Darder, A., & Torres, R.D. (1997). *The Latino studies reader: Culture, economy, & society*. Malden, MA: Blackwell.
- Darling N., & Steinberg, L. (1997) Community influences on adolescent achievement and deviance. In J. Brooks-Gunn, C. Duncan, J.L. Aber, (Eds.) *Neighborhood poverty: Policy implications of studying neighborhoods*. New York, NY: Russel Sage Foundation.
- Delgado, R., & Stefancic, J. (2001). *Critical race theory: An introduction*. New York, NY: New York University Press.

- Delgado, R. & Stefancic, J. (1998). *The Latino-a condition: A critical reader*. New York, NY: New York University Press.
- Dishion, T.J., & Kavanaugh, K. (2003). *Interviewing in adolescent problem behavior: A family-centered approach*. New York: Guilford Press.
- Dukewich, T.L., Borkowski, J.G., & Whitman, T.L. (1996). Adolescent mothers and child abuse potential: An evaluation of risk factors. *Child Abuse & Neglect*, 20(11), 1031-1047.
- Durand, J., Telles, E., & Flashman, J. (2006). The demographic foundations of the Latino population. National Research Council. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 66-99) Washington, DC: The National Academies Press.
- Falcón, A., Aguirre-Molina, M., & Molina, C.W. (2001) Latino health policy: Beyond demographic determinism. In M. Aguirre-Molina, C.W. Molina, & R.E. Zambrana, (Eds). *Health Issues in the Latino Community*. San Francisco, CA; Jossey-Bass.
- Fischer, M.J., & Tienda, M., (2006). Redrawing spatial color lines: Hispanic metropolitan dispersal, segregation, and economic opportunity. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 66-99) Washington, DC: The National Academies Press.
- Fitzpatrick, K.M. (1997). Fighting among America's youth: A risk and protective factors approach. *Journal of Health and Social Behavior*, 38(2), 131-148.
- Flores, J. (2000). *From bomba to hip-hop: Puerto Rican culture and Latino identity*. New York: Columbia-University.
- Flores, J. (1993). "Que assimilated, brother, yo soy asimilao": The structuring of Puerto Rican identity. *Divided Borders: Essay on Puerto Rican Identity*, pp182-195. Houston, TX: Arte Público Press.

- Flores, M.T. (2000). La Familia Latina. In M.T. Flores & G. Carey, (Eds.). *Family therapy with Hispanics: Toward appreciating diversity*. Needham Heights, MA: Allyn & Bacon.
- Franke, T.M. (2000) Adolescent violent behavior: An analysis across and within racial/ethnic groups. *Journal of Multicultural Social Work*, 8(1/2), 47-70.
- Frey, W., & Farley, R. (1996). Latino, Asian, and Black segregation in US metropolitan areas: Are multi-ethnic metros different? *Demography*, 33(1), 35-50.
- Ford, T., Stevenson, P.R., Wiener, P.L., & Wait, R.F. (2002). The role of internalization of gender norms in regulating self-evaluations in response to anticipated delinquency. *Social Psychological Quarterly*, 65(2), 202-212.
- Fulingi, A.J., Tseng, V., & Lam, M. (1999). Attitudes towards familial obligations among American adolescents of Asian, Latin American, and European background. *Child Development*, 70(4), 1030-1044.
- Goffman E. (1983). The interaction order. American Sociological Association, 1982 Presidential Address. *American Sociological Review*, 48(1), 1-17.
- González, N.L. (1984). Rethinking the consanguineal household and matrifocality. *Ethnology*, 23(1), 1-12.
- Gordon, M.M. (1964). *Assimilation in American life: The role of race, religion, and national origins*. New York: Oxford University Press.
- Gorman-Smith, D., Henry, D.B., & Tolan, P.H. (2004). Exposure to community violence and violence perpetration: the protective effect of family functioning. *Journal of Clinical and Adolescent Psychology*, 33(3), 439-449.
- Gorman-Smith, D., Tolan, P.H., & Henry, D.B., (2000). A developmental-ecological model of the relation of family functioning to patterns of delinquency. *Journal of Quantitative Criminology*, 16, 169-198.

- Gottfredson, M.R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.
- Grenier, G.J., & Pérez, L. (1996). Miami spice: the ethnic cauldron simmers. In S. Pedraza, & R. Rumbaut (Eds.). *Origins and Destinies: Immigration, race, and ethnicity in America*. (pp.360-372) Belmont, CA: Wadsworth Publishing Co.
- Guerra, N.G., & Williams, K.R. (2006) Ethnicity, youth violence, and the ecology of development. In N.G. Guerra & E.P. Smith, (Eds.) *Preventing youth violence in a multicultural society*. (pp. 17-45) Washington, DC: American Psychological Association.
- Halgunseth, L.C., Ispa, J.M., & Rudy, D. (2006). Parental control in Latino families: An integrated review of the literature. *Child Development*, 77(5), 1282-1297.
- Harrison, A.O., Wilson, M.N., Pine, C.J., Chan, S.Q., Buriel, R. (1990). Family ecologies of ethnic minority children. *Child Development*, 61(2), 347-362.
- Hart, J.L, O'Toole, S.K., Price-Sharps, J.L., & Shaffer, T.W. (2007). The risk and protective factors of violent juvenile offending: An examination of gender differences. *Youth Violence and Juvenile Justice*, 5(4), 367-384.
- Hawkins, D.F., Laub, J.H., Lauristein, J.L. (1998). Race, ethnicity, and serious juvenile offending. In R. Loeber & D.P. Farrington (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions* (pp.30-46). Thousand Oaks, CA: Sage.
- Heerenkohl, T.I., Maguin, E., Hill, K.G., Hawkins, D.J., Abbott, R.D, Catalano, R.F. (2000). Developmental risk factors for youth violence. *Journal of Adolescent Health*, 26, 176-186.
- Hofrichter, R. (2003). The politics of health inequities: Contested terrain. In R Hofrichter (Ed). *Health and Social Justice: Politics, Ideology, and Inequity in the Distribution of Disease, A Public Health Reader*. (pp. 1-56) San Francisco, CA: Jossey-Bass.

- Hunt, L.M., Schneider, S., & Comer, B. (2004). Should “acculturation” be a variable in health research? A critical review of the research on US Hispanics. *Social Science and Medicine*, 59, 973-986.
- Ingoldsby, B.B. (1991). The Latin American family: Familism vs. machismo. *Journal of Comparative Family Studies*, 22(1), 57-62.
- Israel, B.A., Eng, E., Schulz, A.J., & Parker, E.A. (2005) *Methods in Community-Based Participatory Research*. San Francisco, CA: Jossey-Bass
- Jackson, C., & Foshee, V.A. (1998). Violence-related behaviors among adolescents: Relations with responsive and demanding parenting. *Journal of Adolescent Research*, 13(3), 343-359.
- Jacob, J.C. (2006). Male and female youth crime in Canadian communities: Assessing the applicability of social disorganization theory. *Canadian Journal of Criminology and Criminal Justice*, 48(1), 31-60.
- Jarrett, R.L. (1997a). Resilience of low-income African American Youth: An ethnographic perspective. *Ethos*, 25(2), 218-229.
- Jarrett, R.L. (1997b). Successful parenting in high-risk neighborhoods. *The Future of Children*, 9(2), 45-50.
- Jelin, E. (1991). Family and household: Outside world and private life. *Family, household and gender relations in Latin America*. In E. Jelin (Ed). (Pp 9-11). New York, NY: Kegan Paul International.
- Jelin, E. (1991). Social relations of consumption: The urban popular household. *Family, household and gender relations in Latin America*. In E. Jelin (Ed). (Pp 165-198). New York, NY: Kegan Paul International.
- Jones, C.P. (2000). Levels of racism: A theoretic framework and a gardener’s tale. *American Journal of Public Health*, 90, 1212-1215.

- Kaufman, J.M. (2005). Explaining the race/ethnicity-violence relationship: Neighborhood context and social psychological processes. *Justice Quarterly*, 22(2), 224-251.
- Kim, J.E., Hetherington, M., Reiss, D. (1999). Association among family relationships, antisocial peers, and adolescents' externalizing behaviors: gender and family type differences. *Child Development*, 70(5), 1209-1230.
- Landale, N.S., Oropesa R.S., & Bradatan, C. (2006). Hispanic Families in the United States: Family Structure and Process in an Era of Family Change. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the Future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 138-178) Washington, DC: The National Academies Press.
- Laurenstein, J.L., & White, N.A. (2001). Putting violence in its place: the influence of race, ethnicity, gender, and place in the risk for violence. *Criminology & Public Policy*, 1(1), 37.
- Link, B.G., & Phelan, J.C., (2000). Evaluating the fundamental cause explanation for social disparities in health. In C.D. Bird, P. Conrad, & A.M. Freemont (Eds.). *Handbook of Medical Sociology*. Upper Saddle River, NJ: Prentice-Hall.
- Link B.G, & Phelan J.C., (1996). Editorial: Understanding sociodemographic differences in health—the role of fundamental causes. *American Journal of Public Health*, 86(4), 471-473.
- Lipsey, M.W., & Derzon, J.H. (1998). Predictors of violent and serious delinquency in adolescence and early adulthood: A synthesis of longitudinal research. In R. Loeber & D.P. Farrington (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions* (pp.30-46). Thousand Oaks, CA: Sage.
- Loeber, R., & Hay, D. (1997). Key issues in the development of aggression and violence from childhood to early adulthood. *Annual Review of Psychology*, 48, 371-410.
- Loeber, R., & Stouthamer-Loeber, M. (1986) Family factors as correlates and predictors of juvenile conduct problems and delinquency. In M. Tonry & N. Morris (Eds.), *Crime and Justice*. Chicago, ILL: University of Chicago Press.

- Lomnitz, L. & Pérez-Lizaur, M. (1991). Dynastic growth and survival strategies: The solidarity of Mexican grand-families. *Family, household and gender relations in Latin America*. E. Jelin (Ed). Pp 123-132. New York, NY: Kegan Paul International.
- Lugo-Steidel, A.G., & Contreras, J.M. (2003). A new familism scale for use with Latino populations. *Hispanic Journal of Behavioral Sciences*, 25(3), 312-330.
- Lynch M., & Cicchetti, D. (2002). Links between community violence and the family system: Evidence from children's feelings of relatedness and perceptions of parent behavior. *Family Process*, 41(3), 519.
- Margolin, G., & Gordis, E.B. (2000) The effects of family and community violence on children. *Annual Review of Psychology*. 51, 445.
- Martínez R. (2003). Moving beyond Black and White violence: African Americans, Haitian, and Latino homicides in Miami. In D.F. Hawkins, (Ed.). *Violent Crime: Assessing Race and Ethnic Differences*. New York, NY: Cambridge University Press.
- Martínez, R. (2002). *Latino homicide: Immigration, violence, and community*. New York, NY: Routledge Press.
- Martínez, R. (1996). Latinos and lethal violence: The impact of poverty and inequality. *Social Problems*, 43(2), 131-146.
- Massey, D.S. (1994). American apartheid and the urban underclass. *Social Science Review*, 68(4), 471-487.
- Massey, D.S. (1990). American apartheid: Segregation and the making of the underclass. *The American Journal of Sociology*, 96(2), 329-357.
- Massey, D.S. & Bitterman, B. (1985). Explaining the paradox of Puerto Rican segregation. *Social Forces*, 64(2), 306-331.

- Massey, D.S., & Denton, N.A. (1985). Spatial assimilation as a socioeconomic outcome. *American Sociological Review*, 50(1), 94-106.
- Massey, D.S., Gross, A.B., & Shibuya, K., (1994). Migration, segregation, and the geographic concentration of poverty. *American Sociological Review*, 59(June), 425-445.
- McNulty, T.L., Bellair, P.E. (2003a). Explaining racial and ethnic differences in serious adolescent violent behavior. *Criminology*, 41(3), 709-747.
- McNulty, T.L., Bellair, P.E. (2003b). Explaining racial and ethnic differences in adolescent violence: Structural disadvantage, family well being, and social capital. *Justice Quarterly*, 20(1), 1-31.
- McNulty, T.L., Bellair, P.E. (2005). Beyond the bell curve: Community disadvantage and the explanation of Black-White differences in adolescent violence. *Criminology*, 43(4), 1135-1169.
- Mejía Ricart, T. (1975). Observaciones sobre el machismo en America Latina. *Revista de Ciencias Sociales*, 19(3), 351-364.
- Mirabal-Colón, B., Vélez, C.N. (2006). Youth violence prevention among Latino youth. In N.G. Guerra, & E.P. Smith (Eds.). *Preventing youth violence in a multicultural society*. (pp. 103-126) Washington, DC: American Psychological Association.
- Moore, M. (2007). Is it really so different for girls? Challenging misconceptions about young offenders and aggression. *Community Safety Journal*, 6(3), 44-49.
- Ness, C.D. (2004). Why girls fight: Female youth violence in the inner city. *Annals of the American Academy of Political and Social Science*, 592, 32-48.
- Ortner, S.B. (1989). *High religion: A cultural and political history of Sherpa Buddhism*. Princeton, New Jersey: Princeton University Press.
- Pabón, E. (1998). Hispanic adolescent delinquency and the family: A discussion of sociocultural influences. *Adolescence*, 33(132), 941-955.

- Pedraza, S. (1996) Origins and destinies: Immigration, race, and ethnicity in American history. In S. Pedraza, & R. Rumbaut (Eds.) *Origins and Destinies: Immigration, Race, and Ethnicity in America*. (pp. 1-20) Belmont, CA: Wadsworth Publishing Company.
- Peterson, D., Esbensen, F., Taylor, T.J., & Freng, A. (2007). Youth violence in context: the roles of sex, race, and community in offending. *Youth Violence and Juvenile Justice*, 5(4), 385-410.
- Peterson R.D, & Krivo, L.J. (2005). Macrostructural analysis of race, ethnicity, and violent crime: Recent lessons and new directions for research. *Annual Review of Sociology*, 31, 331.
- Portes, A., Fernández-Kelly, P., & Haller, W. (2005). Segmented assimilation on the ground: The new second generation in early adulthood. *Ethnic and Racial Studies*, 28(6), 1000-1040.
- Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The Annals of the American Academy of Political and Social Science*, 530, 74-96.
- Ramírez, R.L. (1999). *Dime Capitán: Reflexiones sobre la masculinidad*. Rio Piedras, Puerto Rico: Ediciones Huracán.
- Ramírez, R.L., García-Toro, V.I., & Cunningham, I. (2002). *Caribbean masculinities: Working papers*. Rio Piedras, Puerto Rico: HIV/AIDS Research and Education Center.
- Ramírez, J.R., Crano W.C., Quist R., Burgoon, M., Alvaro, E.M., & Grandpré, J. (2004). Acculturation, familism, and parental monitoring, and knowledge as predictors of marijuana and inhalant use in adolescents. *Psychology of Addictive Behaviors*, 18(1), 3-11.
- Rapp, R. (1991). Family and class in contemporary America: Notes towards an understanding of ideology. *Family, household and gender relations in Latin America*. E. Jelin (Ed). Pp 197-215. New York, NY: Kegan Paul International.

- Reimers, C. (2006) Economic well being. *Hispanics and the Future of America*. M. Tienda and F. Mitchell, eds. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 291-361) Washington, DC: The National Academies Press.
- Rodríguez, J.M., & Kosloski, K. (1998). The impact of acculturation on attitudinal familism in a community of Puerto Rican Americans. *Hispanic Journal of Behavioral Sciences*, 20(3): 375-391.
- Rodríguez, O., & Weisburd, D. (1991). The integrated social control model and ethnicity: the case of Puerto Rican American delinquency. *Criminal Justice and Behavior*, 18(4), 464-479.
- Romero, M., Hondagneu-Sotelo, P., & Ortiz, V. (1997). *Challenging fronteras: Structuring Latina and Latino lives in the U.S.* New York: Routledge.
- Rumbaut, R.G. (2006). The making of a people. *Hispanics and the Future of America*. M. Tienda and F. Mitchell, eds. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 16-65) Washington, DC: The National Academies Press.
- Sabogal, F., Marin, G., Otero-Sabogal, R., VanOss Marin, B., & Pérez-Stable, E. (1987). Latino familism and acculturation: What changes and what doesn't? *Latino Journal of Behavioral Sciences*, 9, 397-412.
- Safa, H.I. (1996). *The myth of the male breadwinner: Women and industrialization in the Caribbean*. Boulder, CO: Westview Press.
- Sallis, J.F., & Owen, N. (2002). Ecological models of health behavior. K. Glanz, & B.K. Lewis, (Eds.). *Health Behavior and Health Education: Theory, Research, and Practice*. San Francisco, CA: Jossey-Bass.
- Sampson, R.J. (2008). Rethinking crime and immigration. *Contexts*, 7(1), 28-33.
- Sampson, R.J. (2003). The neighborhood context of well-being. *Perspectives in Biology and Medicine*, 43(3), S53-S64.

- Sampson, R.J., & Wilson, W.J. (1995). Toward a theory of race, crime, and urban inequality. In J. Hagan & R. Peterson (Eds.), *Crime and Inequality*. Sanford, CA: Stanford University Press.
- Sampson, R.J. & Morenoff, J.D. (1997). Ecological perspectives on the neighborhood context of urban poverty: Past and present. In J. Brooks-Gunn, G.J. Duncan, & J.L. Aber (Eds.) *Neighborhood Poverty Volume II: Policy Implications in Studying Neighborhoods*. (1-22). New York, NY: Russell Sage Foundation.
- Sampson, R.J., & Laurenstein, J.L. (1994). Violent victimization and offending: individual, situational, and community-level risk factors. In *Understanding and Preventing Violence, Vol. 3, Social Influences*. Washington, DC: National Research Council, National Academy Press.
- Sampson R.J., Morenoff J.D., Raudenbush S., (2005). Social anatomy of racial and ethnic disparities in violence. *American Journal of Public Health*, 95(2), 224-232.
- Sampson, R.J., Morenoff, J.D., & Gannon-Rowley, T. (2002). Assessing “neighborhood effects”: Social processes and new directions in research. *Annual Review of Sociology*, 28, 443-478.
- Santiago, A.M., & Galster, G. (1995). Puerto Rican segregation in the United States: Cause or consequence of economic status? *Social Problems*, 42(3), 361-389.
- Santiago, A.M., & Wilder, M.G. (1991). Residential segregation and links to minority poverty: The case of Latinos in the United States. *Social Problems*, 38(4), 492-515.
- Schneider, B., Martínez, S, & Owens, A. (2006). Barriers to Educational Opportunities for Hispanics in the United States. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the Future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 179-227) Washington, DC: The National Academies Press.
- Schulz, A.J., & Northridge, M.E. (2004). Social determinants of health: implications for environmental health promotion. *Health Education and Behavior*, 31(4), 455-471.

- Shaw, C.R., & McKay, H.D. (1942). *Juvenile delinquency in urban areas*. Chicago, Ill.: University of Chicago Press.
- Smith, E.P., & Guerra N.G. (2006). Introduction. In N.G. Guerra, & E.P. Smith, (Eds.). *Preventing youth violence in a multicultural society*. Washington, DC: American Psychological Association.
- Smith C., & Krohn, M.D. (1995). Delinquency and family life among male adolescents: the role of ethnicity. *Journal of Youth and Adolescence*, 24(1), 69-93.
- Sommers, I., & Baskin, D.R. (1994). Factors related to female adolescent initiation into violent street crime. *Youth & Society*, 25(4), 468-489.
- Stack, C.B. (1974). *All our kin: Strategies for survival in a Black community*. New York, NY: Harper & Row Publishers, Inc.
- Steffensmeier, D., Schwartz, J., Zhong, H., & Ackerman, J. (2005). An assessment of recent trends in girls' violence using diverse longitudinal data sources: Is the gender gap closing? *Criminology*, 43(2), 355-405.
- Stein N., Katz R., Madriz E., & Shick S. (1997). Losing a generation: probing myths and realities of youth and violence. *Social Justice*, 24(4), 1-6.
- Stokols, D. (1992). Establishing and maintaining healthy environments: Towards a social ecology of health promotion. *American Psychologist*, 47(1), 6-22.
- Stycos, J.M. (1958). *Familia y fecundidad en Puerto Rico*. México: Fondo de Cultural Económica.
- Tienda, M. (1980). Familism and cultural assimilation of Mexican immigrants in the United States. *International Migration Review*, 14(3), 383-408.
- U.S. Department of Health and Human Services, U.S. Public Health Service (DHHS) (2001). Youth violence: A report of the surgeon general. Rockville, MD: US Department of Health and Human Services.
<http://www.surgeongeneral.gov/library/youthviolence/toc.html>

- U.S. Department of Health and Human Services. (DHHS) (2004). *National survey on drug use and health: Female youths and delinquent behaviors*. The NSDUH Report Retrieved November 29, 2008, from <http://www.oas.samhsa.gov/2k4/girlDelinquents/girlDelinquents.htm>
- U.S. Department of Health and Human Services. (DHHS) (2000). *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, D.C. U.S. Government Printing Office.
- Vargas, M., & Busch-Rossnagel, N.A. (2000). Authority plus affection: Latino parenting during adolescence. In M. Montero-Sieburth, & F. Villarruel, (Eds.) *Making invisible Latino adolescents visible: A critical approach to Latino diversity*. New York, NY: Falmer Press.
- Vázquez García, H.A., García Coll, C., Erkut, S., Alarcón, O., & Tropp, L.R. (2000). Family values of Latino adolescents. M. Montero-Sieburth, & F. Villarruel, (Eds.) *Making invisible Latino adolescents visible: A critical approach to Latino diversity*. New York, NY: Falmer Press.
- Vega, W.A. (1990). Hispanic families in the 1980s: A decade of research. *Journal of Marriage and the Family*, 52(4), 1015.
- Villarreal, R., Blozis, S.A., & Widaman, K.F. (2005). Factorial invariance of a pan-Hispanic familism scale. *Hispanic Journal of Behavioral Sciences*, 27(4), 409-425.
- Villarruel, F.A., & Montero-Sieburth, M. (2000). Latino youth and America: time for change. In M. Montero-Sieburth, & F. Villarruel, (Eds.) *Making invisible Latino adolescents visible: A critical approach to Latino diversity*. New York, NY: Falmer Press.
- Walker, S.C., Maxson, C., & Newcomb, M.N. (2007). Parenting as a moderator of minority, adolescent victimization and violent behavior in high-risk neighborhoods. *Violence and Victims*, 22(3), 304-317.
- Welch, M., Price, E.A., & Yankey, N. (2002). Moral panic about youth violence: Wilding and the manufacturing of menace in the media. *Youth & Society*, 34(1), 3-30.

- Wilkinson, R. G., Kawachi, I., & Kennedy, B.P. (1999). Mortality, the Social Environment, Crime, and Violence. In I. Kawachi, B.P. Kennedy, & R.G. Wilkinson, (Eds.). *The Society and Population Health Reader: Income Inequality and Health*. (pp. 305-319) New York, NY: New York Press.
- Williams, D. R. & Collins, C. (2001). Racial residential segregation: A fundamental cause of racial disparities in health. *Public Health Reports*, 116, 404-416.
- Wilson, P.J. (1969). Reputation and respectability: A suggestion for Caribbean ethnography. *Man*, New Series, 4(1), 79-84.
- Wilson, W.J. (1987). *The truly disadvantaged: the inner city, the underclass, and public policy*. Chicago, Ill: The University of Chicago Press.
- Yosso, T.J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race, Ethnicity, and Education*, 8(1), 69-91.
- Zayas, L.H., & Palreja, L. (1988). Puerto Rican familism: Considerations for family therapy. *Family Relations*, 37(3), 260.
- Zhou, M. (1997). Segmented assimilation: Issues, Controversies, and Recent Research on the New Second Generation. *The International Migration Review*, 31(4), 975-1008.

CHAPTER 3

UNPACKING THE INFLUENCE OF FAMILY CONTEXT ON YOUTH VIOLENCE ACROSS RACE/ETHNICITY: AN ANALYSIS AMONG LATINOS, BLACKS, AND WHITES

Youth violence is a significant problem in the United States that leads to physical, psychological, and social injuries, ultimately contributing to the deterioration of the quality of life and fabric of human relationships. National trends in homicides and violent behaviors indicate an increased risk among Blacks and Latinos compared to Whites (CDC, 2006). Although some evidence points to variations by type of violence (Franke, 2000), other evidence shows a much smaller difference in the risk of violence between Whites and Latinos compared to Whites and Blacks (Sampson, Morenoff, & Raudenbush, 2005; Kaufman, 2003; CDC, 2006). For example, using the National Longitudinal Study of Adolescent Health (Add Health), Franke (2000) found that Black and Latino adolescents were significantly more likely to engage in a serious physical fight and/or threaten someone by pulling a gun or knife during the previous year than Whites. While Latinos had somewhat lower rates on these measures than Blacks, they were significantly more likely than Black youth to have shot or stabbed someone. McNulty and Bellair (2003a) and Kaufman (2005) also found Latinos had higher rates of serious violent behavior compared to Blacks. However, Sampson, Morenoff and Raudenbush (2005) reported that in Chicago, Blacks had the highest risk of committing a violent act compared to Whites, while Mexicans had the lowest risk of violent behaviors in the sample. The risk of Puerto Ricans/Other Latinos was 30% and 26% higher than

Mexicans and Whites, respectively. By making a distinction between Mexicans and other Latinos this study challenges the assumed homogeneity in the pan-ethnic label and provides support for the significance of conducting subgroup analysis. Most previous studies of youth violence have not made this critical distinction.

Several limitations continue to constrain our understanding of violence among Latinos. First, the lack of descriptive information pertaining to within-group differences of violent behaviors and many risk and protective factors among this pan-ethnic population, which has ultimately hindered the development of effective responses to the problem. The composition of the Latino pan-ethnic category has become increasingly heterogeneous in terms of national origin, socioeconomic status, and tenure in the United States, immigration experiences, geographic concentration, and political clout, among others (Rumbaut, 2006; Durand, Telles, & Flashman, 2006; Fischer & Tienda, 2006; Portes & Grosfoguel, 1994). The changing demographic composition raises important questions about the role of ethnicity in shaping Latino adolescents' health outcomes.

Second, the majority of information on the distribution of youth violence has focused its attention on exposure to violence and patterns of victimization (Dahlberg & Krug, 2002; Fitzpatrick, 1997; Gorman-Smith, Henry, & Tolan, 2004; Guerra & Williams, 2006; Martínez, 2003). More research is needed to understand violence from the perspective of adolescents who perpetrate it. By influencing antecedents to perpetration specifically, we can ultimately develop more effective intervention strategies that impact adolescents' violence, thus decreasing the physical, psychological, and social injuries that stem from it. Lastly, even though there is considerable evidence that different factors within the family environment play critical roles in the development of

youth violent behaviors, there is very little analysis of the roles of these environments *within* Latino subgroups specifically, particularly as they compare to other racial and ethnic groups in the United States (Gorman-Smith, Tolan, & Henry, 2000; Baumrind, 1991; Halgunseth, Ispa, & Rudy, 2006; for exception see Smith & Krohn, 1995 and Vásquez García, García Coll, Erkut, Alarcón, & Tropp, 2000). The purpose of this study is to determine the differences in the prevalence of violent behaviors across different Latino ethnic subgroups in the United States and how these compare to White and Black adolescents. Further, it examines the role of culture, as reproduced in the family, in explaining racial/ethnic differences in violence, and whether the effects of different family characteristics on the prevalence of youth violence vary across racial/ethnic groups.

Latino Families and Youth Violence

The guiding framework for this study is the ecological systems theory, which highlights the dynamic social, historical, and cultural milieus in which people relate at multiple systems of interaction (micro-, meso-, exo-, macro-, and chronosystems) (Bronfenbrenner, 1988). The microsystem contains all direct relationships and interactions a person has with his or her immediate surroundings (i.e., family, school, neighborhood, work) and has the strongest, bidirectional influence on a person's development. The interactions of environments within and across systems are critical in ecological theory. The mesosystem is where the connection between the environments in the microsystem occurs (e.g., families and schools or families and neighborhoods). The exosystem includes the larger social structures that impact the development of individuals

by interacting with structures in the microsystem (e.g., parents' work schedules that may interfere with time spent with children), while the macrosystem highlights the cultural values, customs, and larger political and economic orders that shape those interactions. These systems put in context findings between the connections of individual, family, and neighborhood factors and adolescent violence through new interpretations of cultural theories that demonstrate adaptations to minimize the impact of poverty, discrimination, and social alienation encountered in different systems. Finally, the chronosystem incorporates the dimension of changes in time of structures in the different systems (Bronfenbrenner, 1988).

The ecological theory points out that dynamics within and across environments in the microsystem are critical to understanding adolescents' development and behaviors. The family is a central environment within the microsystem where cultural values, customs, and worldviews are shaped (Harrison, Wilson, Pine, Chan, & Buriel, 1990). For the purpose of this analysis, I focus my discussion of culture as it is reproduced within the household and extended family. I borrow from Lomnitz and Pérez-Lizaur who conceptualized family as a "cultural category implying a set of norms governing expected behavior between kin and, as part of the grammar of behavior, reinforcing the economic, social and ritual aspects of solidarity. Such behavior is grounded in repeated acts of exchange and is reflected in an ideology shaped by the values and beliefs of the kin group and its members" (1991; 123). The current study delves further into the relationship between family dynamics and youth violence by highlighting distinct characteristics for different Latino ethnic subgroups.

The role of families in child and adolescents' development has long been established in the social and behavioral sciences literature. Values and norms are reproduced across generations and learned through socialization processes that are adaptive to larger environments. Families are thought to be the basic unit responsible for socialization, control and supervision of children and adolescents, and key to protecting them from negative outside influences (Loeber & Hay, 1997; Loeber & Stouthamer-Loeber, 1986). Dahlberg (1998) describes family factors that influence adolescents' aggression, violence, and delinquency as those related to the a) quality of the relationship between parent and child (e.g., emotional attachment), b) parental problem behaviors (e.g. criminal activities, drug or alcohol abuse) and parenting practices (e.g., supervision and monitoring), and c) overall family functioning (e.g., communication, cohesion, family conflict/violence).

There is considerable work describing the importance of attachment to the family on Latino adolescents' behavioral and academic outcomes, characteristics which have in turn been linked to violent behaviors in the general literature (Franke, 2000; Kaufman, 2003; Flores, 2000; Vásquez García, García Coll, Erkut, Alarcón, & Tropp, 2000; Vargas & Busch-Rossangel, 2000). Moreover, in a study of adolescent males, Smith and Krohn (1995) found that family structure and parent-child involvement was a stronger predictor of delinquency for Latinos than for Blacks or Whites. However, this study did not look at within-Latino ethnic variations nor did the sample include females, leaving a serious gap in the literature. In a study comparing Puerto Rican males in South Bronx (1986-87) with results among White males from the National Youth Survey (NYS; 1976-77), Rodríguez and Weisburd (1991) found that family involvement had a significant protective effect

among the former, but not the latter. However, the level of involvement did not differ significantly between groups. Linking family findings to larger processes, Mirabal-Colón and Vélez (2006) argued that socio-cultural factors reproduced within the family may protect Latinos from higher rates of violence compared to Blacks, even though both groups show low socioeconomic profiles. This assertion, however, must be taken with caution given the potential ethnic subgroup differences in violent behaviors and family environments.

The discussion of the role of culture and assimilation in health outcomes among Latinos has received considerable attention in the last decade (see Hunt, Schneider & Comer, 2004; Amaro & De La Torre, 2002; Arcia, Skinner, Bailey, & Correa, 2001 for a comprehensive review of this literature). Hunt, Schneider, and Comer (2004) pointed out that it is hasty to label things as cultural changes without a clear understanding of what immigrant groups are changing *from* and *into*. Much of this literature seems to assume that native Latino cultures are less violent than American culture. However, although the U.S. has among the highest rates of morbidity and mortality due to violence in the industrialized world, the rates of violence are extremely high in several Latin American countries, including Mexico and Puerto Rico (Dahlberg & Krug, 2002). A more thorough exploration of violence within sending countries is needed to make claims about cultural changes. In spite of this theoretically shallow understanding of acculturation and violent behaviors, much of the literature describing Latino culture agrees that this population is (broadly described) as collectivistic, a trait viewed as protective against the development of youth violence. A collectivistic worldview stresses the provision of needs and goals for

the group above those of particular individuals (Boutakidis, Guerra, & Soriano, 2006; Mirabal-Colón & Vélez, 2006).

A central aspect of collectivism among Latinos is the concept of *familism*, which stresses the role of family as being the center of one's life, directly affecting the relationships of individuals within the family and their behaviors when interacting with others (Mirabal-Colón & Vélez, 2006; Zayas & Palreja, 1988; Schwartz, Zamboanga, Rodríguez, & Wang, 2007). Most *familism* definitions emphasize the importance of unity and adherence to particular gender roles in public situations and the deference to authority figures (Ingoldsby, 1991; Vega, 1990; Zayas & Palreja, 1988). Both Sabogal and colleagues (1987) and Vásquez García and colleagues (2000) pointed out that *familism* persists despite ethnic and generational differences among Latinos. However, its influence on violent behaviors has not been empirically examined across ethnic subgroups. Furthermore, Landale and colleagues have described *familism* as a multidimensional concept that includes relational and demographic components: attitudinal foundation (values that emphasize the centrality of family), behavioral manifestations (fulfillment of obligations and roles), and family demography (size and structure, composition and dispersion, including fictive and extended kin in the household and neighborhood).

Despite findings on the presence of *familism* across ethnic and generational subgroups (Flores, 2000; Sabogal et al., 1987; Vásquez García et al., 2000), its effect may differ across them depending on the dimension measured (Carlos & Sellers, 1972; Tienda, 1980; Landale, Oropesa, & Bradatan, 2006). For example, among a sample of Puerto Rican males in South Bronx, Pabón (1998) found that of eight dimensions of

family environment, only family involvement was a significant predictor of delinquency. *Familism* (defined as “the extent to which the respondent adheres to traditional Hispanic notions of family loyalty”) did not have a significant effect. The extent to which these findings are replicated across different Latino ethnic subgroups is still unknown.

Considering the critical role of families as described in the literature, it is important to note that structural family characteristics tend to vary substantially by ethnic and generational subgroup. The National Research Council describes Latinos as a very heterogeneous group, particularly when it comes to household composition and economic well-being (Landale, Oropesa, & Bradatan, 2006; Reimers, 2006), which have important influences on adolescents’ violent behaviors (Blum et al., 2000). According to Landale and colleagues, 69.5% of Cuban and 67.2% of Mexican children live in household with married parents, compared to 42.4% of Puerto Rican children (whose numbers resemble more that of Blacks [36.9%]). On the other hand 45.6% of Puerto Ricans live with only their mothers, while 22.8% of Mexicans and 21.9% of Cubans do so. The three groups however, are similarly likely to live in households with extended family (8.4% among Mexicans, 7.2% among Puerto Ricans, and 6.5% among Cubans) (Landale, Oropesa, & Bradatan, 2006).

Several additional factors have been mentioned in the literature as important influences on violent behaviors. Although they are not the focus on this study, it is important to consider their influence when exploring racial/ethnic differences. First, a vast body of research suggests that violent behaviors peak in late adolescence and decrease rapidly with age (Dahlberg, 1998; Dahlberg & Potter, 2001). This finding is fairly consistent across the literature, although new evidence suggests it may vary by

racial/ethnic group (Harris, Gordon-Larsen, Chantala, & Udry, 2006). Second, when it comes to gender differences there is a clear consensus in the literature that males are at an increased risk (Daigle, Cullen, & Wright, 2007; Hart, O'Toole, Price-Sharps, & Shaffer, 2007; Blum et al., 2000; Dahlberg, 1998). Family socioeconomic status has also been identified in the literature as highly influential of adolescents' behaviors and of critical importance when considering racial/ethnic differences in violence outcomes. This is likely to influence youth violence through the type of neighborhood the family is able to reside in, and the parents' ability to garner resources that foster positive learning environments, as well as their ability to deal with financial pressures. Further, economic status may vary widely by ethnic subgroup and generation. Reimers (2006) found that among Mexican children, 42.6% live in poor households during the first generation, improving by the third generation to 26.8%. Among Puerto Ricans, rates are consistently higher with 53.6% and 35.6% of first and third generation children living in poverty respectively. Cubans on the other hand have much lower poverty rates at all generations, with 31.2% of first generation and 4.4% of third generation children living in poverty (Reimers, 2006). Given the differences in economic indicators across the different subgroups, using multiple measures of family socioeconomic status may better capture the influence of economic resources on violent behaviors.

A final factor when considering Latinos is the extent to which immigration directly and indirectly impacts violent behaviors. Approximately 39% of the Latino population in the United States is foreign-born (Durand, Telles, & Flashman, 2006) and it is important to consider the potential effects of immigration on family dynamics that may foster alienation among youth. Within the family, immigration and acculturation may

foster intergenerational tensions. Parents who adhere to values and behavioral expectations emphasized in their native countries may render unacceptable the overemphasis on individualism and restructuring of gender roles in mainstream America (Jelin, 1991; Zhou, 1997). Adolescents who grow up in the United States may also serve as cultural brokers for their parents, shifting parental roles, since the security and protection generally afforded by them may not be present due to low social status of many recent immigrants. Given the close relationship of immigrant generation with family dynamics and economic resources, and recent findings on the distribution of violence by generation (Bui & Thongniramol, 2005), this must be considered in any assessment of violent behaviors among Latinos.

This study addresses several limitations in previous research by: a) examining differences in youth violent behaviors among a racially and ethnically diverse sample of adolescents, and b) examining the influence of different dimensions of *familism* on youth violence across groups. Specifically, the following questions are addressed:

Do adolescents in different ethnic groups differ in the prevalence of self-reported violent behaviors from White adolescents and from each other?

Consistent with previous research, I hypothesize that Latinos ethnic subgroups and Blacks will differ in their prevalence of violent behaviors from Whites. Further, I expect there to be significant differences in the prevalence of violent behaviors of adolescents within the different Latino ethnic subgroups, who in turn will differ from Blacks. Specifically, I expect Blacks to have the highest levels of violent behaviors. Considering research that suggest that Puerto Ricans have lower family socioeconomic profiles and are more likely to live in single parent households than other Latino groups, and that Cubans have higher family socioeconomic profiles and are more likely to live in

two parent households, I expect the risk for Puerto Ricans to be the highest among the Latino groups, followed by Mexicans and Cubans, when compared to Whites. Further, I anticipate that the risk for violent behaviors for Puerto Ricans to resemble that of Blacks, while the risk for Cubans should resemble that of Whites.

Do different dimensions of familism decrease the chances of engaging in violent behavior after adjusting for age, sex, mother's education, family income, and immigrant generation? Do the effects of familism vary by racial/ethnic subgroups?

Considering previous findings on the importance of family environments as protective factors in youth risk behaviors, I hypothesize that relational (i.e., attitudinal and behavioral) and demographic (i.e., family household configurations) *familism* will reduce the risk of violent behaviors. Specifically, adolescents who live in families with higher levels of relational *familism* and those who live in households with two parents or parent(s) and other relatives will be less likely to engage in violent behaviors, regardless of racial/ethnic subgroups after adjusting for controls. Further, based on Smith and Krohn's (1995) and Rodríguez and Weisburd (1991) findings of the importance of family among Latinos, I also anticipate that both relational and demographic *familism* will be more common among Latino youths and thus, have a greater protective effect among them compared to White youth.

Method

Study Design

The data for this study come from the National Longitudinal Study of Adolescents Health (Add Health; Harris et al., 2008), a longitudinal study of the health related behaviors among adolescents. It utilized a complex sampling design with

unequal probability of selection. Schools are the primary sampling units, with 132 middle and high schools selected for the study. The schools were representative in terms of region of the country, urbanicity, size of student body, type (e.g., public, private, and Catholic), and ethnic distribution of student body. Student selection was stratified by grade and sex. Approximately 17 students were chosen at random for each grade/sex stratum for an average of 200 adolescents from each pair of middle and high schools. Post-stratification weights were used to achieve nationally representative results and to adjust for non-response.

Add Health began with an in-school survey of over 90,000 students in grades 7 through 12, followed by a series of in-home interviews with 20,745 adolescents and their primary caretaker in 1994. The data used in the current study comes from the in-home interviews at Wave I (1994-95), which had a 78.9% response rate. All students registered at the schools were eligible to complete the in-home portion of the study, including those who had completed the in-school questionnaire.

A major advantage of this data set is that Puerto Rican, Cuban, and Black adolescents with highly educated parents were oversampled so that a more nuanced subgroup analysis could be conducted. For this study the full sample includes only those who identified as non-Latino Whites, Africans/Caribbean Blacks/African Americans, Cubans/Cuban Americans, Mexicans/Chicano/Mexican Americans (hereafter referred to as Whites, Blacks, Cubans, and Mexicans), and Puerto Ricans. Although the Add Health data set includes Latinos of other national backgrounds (e.g., Honduras, Dominican Republic, El Salvador), sample sizes were not large enough to conduct subgroup analysis. Therefore, they are not included in this study. Further, the

2,125 (11.23% of the total sample) respondents who did not identify within the previous five racial/ethnic groups that are the focus of this study (e.g., Asians, Hawaiian/Pacific Islanders, and Native Americans) are not included. For this study is 16,799 adolescents were eligible. Violence scores were missing for 184 respondents, which were excluded in all analysis, for a final sample size of 16,615. Those not included in the analysis due to missing data were more likely to be male, $\chi^2(1, 16,798) = 24.84, p < .05$, to be first or second generation $\chi^2(2, 16,636) = 24.00, p < .01$, have lower family incomes, $F(1, 128) = 12.30, p < .001$, have mother's with lower levels of education, $F(1, 128) = 14.81, p < .001$, and have lower levels of parental engagement, $F(1, 16,446) = 4.19, p < .05$. Those missing were also less likely to be White, $\chi^2(1, 16,798) = 28.98, p < .01$, and more likely to be Mexican, $\chi^2(1, 16,798) = 19.36, p < .01$, than those who are included in the analysis.

Sample Description

Table 3.1 shows the sociodemographic characteristics for the total sample and by racial/ethnic groups. Results indicate that among the full sample, 50.8% of respondents were male. Cubans made up 2.93%, Puerto Ricans 3.52%, Mexicans 9.55%, non-Latino Blacks/Blacks 24.35%, and non-Latino Whites 59.65% in the core sample. The average age was 15.99 and average family income was \$44,920 (median = \$38,000). The majority of respondents' mothers (or resident maternal figure) had completed high school (33%), with an additional 21.3% having completed college /or professional training. Focusing on the different racial/ethnic subgroups of interest, results in analyses indicate that all minority groups had significantly lower incomes,

$F(4, 128) = 28.09, p < .001$, and levels of mother's education, $F(4, 128) = 43.19, p < .001$) than Whites. Among this group, 23% had completed college and/or a professional degree. This is in contrast to mothers of Cuban and Mexican adolescents' among who only 11.5% and 6%, respectively, had completed college and/or a professional degree. Among Puerto Ricans, nearly 12% of mothers had completed college and/or a professional degree, while among Blacks adolescents, nearly 16% had completed college and/or professional training.

Groups also differed significantly in immigrant generation, $\chi^2(8, 16,630) = 2,036.46, p < .001$. Nearly 87% of the sample was US-born with US-born parents, while 2.5% and 11% were first (i.e., foreign-born) and second (i.e., US-born with at least one foreign-born parent) generation immigrants. Comparing racial/ethnic groups, results indicate that among Whites, less than 1% were first generation, while 90% were third generation or above. By contrast, 31% of Cubans were first generation, and 52% were second generation, while only 17% were third generation or above. Among Mexicans 19% were first generation, while 32% and 46% were second and third generation. Puerto Ricans also had higher rates of third generation or above, with 65% in this category, compared to 5% and 27% who were a part of the first and second generation. These numbers among Puerto Ricans must be interpreted with caution, as some adolescents born on the island may have answered "born in the United States" considering that Puerto Rico is a territory of the United States. Among Blacks 89% were third generation or above, compared to 1% and 9% in the first and second generation.

Table 3.1. Descriptive Statistics of Control Variables, Full Sample and by Racial/Ethnic Group

mean (S.E.)	Full Sample	Whites	Cubans	Mexicans	Puerto Ricans	Blacks
Controls						
Age	15.99 (.119)	15.95 (.130)	16.12 (.784)	15.98 (.277)	15.87 (.367)	16.20 (.214)
Males N^a (%)^b	8,083 (51)	4,858 (51)	242 (46.5)	794 (52)	297 (53.5)	1,892 (50)
Family Income^c	44.99 (1.64)	50.33 (1.92)	31.65 (7.20)	31.70 (1.77)	33.92 (2.57)	29.95 (2.04)
Mother's Education	2.64 (.048)	2.78 (.049)	2.03 (.164)	1.80 (.082)	2.19 (.081)	2.47 (.091)
Immigrant Generation						
% (S.E.)						
First	2.5 (.005)	.7 (.001)	31.3 (.061)	19.1 (.024)	5.4 (.017)	1.4 (.005)
Second	10.9 (.007)	8.3 (.005)	51.5 (.051)	32.0 (.032)	26.9 (.043)	8.8 (.009)
Third	87.7 (.011)	90.3 (.005)	17.1 (.006)	46.2 (.048)	65.1 (.041)	89.1 (.013)

^a = Unweighted sample sizes; ^b = Weighted percentage; ^c = In thousands

Measures

Violent behaviors.

A five-item scale assesses the frequency of violent behaviors during the previous 12 months. Specifically, items measured the frequency for each respondent of having engaged in physical fights, injured someone in a fight, took part in a group fight, pulled a knife or gun on someone, and shot and/or stabbed someone. Items include actions of different severity, thus their response categories differ based on the assumption that more severe actions happened less frequently (never, 1 or 2 times, 3 or 4 times, 5 or more times; never, once, or more than once). Given the different response categories, and following Bellair, Roscigno, and McNulty (2003) methodology with the Add Health data set, each item's responses were coded as a binary outcome. The final

scale is the sum of the responses to each item, ending up with a 0 to 5 score. This allowed the assessment of different types of violent behaviors, rather than the total number of acts committed. The histogram of residuals indicated a positively skewed distribution, which suggests that those with highest violence score were not properly identified. Therefore, a binary variable indicating *no* violence (0) versus *any* violent (1) behaviors was used for all analyses in this study for ease of interpretation (Allison, 1999).

Race and ethnicity.

Respondents were first asked if they were of Hispanic or Latino origin (yes/no). Those who answered yes were then asked to identify their Latino/Hispanic background. Those who reported being Mexican, Mexican-American, Chicano/a, Puerto Rican, and/or Cuban/Cuban American are classified as such and included in the Latino analysis. All respondents were then asked to indicate their racial background (White, black/African American, Indian/Native American, Asian/Pacific Islander, other), to which they could give more than one answer. Over 90% of the sample chose one racial category; however, those that did not were later asked which racial group was their primary identification. Following McNulty and Bellair's (2003a) classification, those who responded 'no' to the Hispanic/Latino ethnicity were coded with their racial classification response. Those who reported more than one racial category were coded based on their answer to their primary identification. The final sample includes those who self-reported as Non-Latino White, Non-Latino Black, Mexican/Mexican American, Chicano/a, Puerto Rican, and Cuban/Cuban American.

Respondents who identified as Mexican/Mexican American and Chicano/a were classified under a single category. For this study, they were coded as dummy variables as follows: 0 – Non-Latino Whites, 1 – Cubans/Cuban Americans, 2 – Mexican/Mexican Americans/Chicanos, 3 – Puerto Ricans, and 4 – Non-Latino Blacks. Although the focus of this study is to understand differences across the different Latino groups, the largest group in the study is Whites. For statistical reasons this group is the reference group for all pooled analysis.

Familism.

According to Landale and colleagues (2006) *familism* is a multidimensional construct that specifies the attitudinal, behavioral, and demographic components integral to family relationships. These factors may be broadly described as influencing violent behaviors through family relationships and household composition. Below is a detailed discussion of the measures constructed for this study based on measures that specify relational and demographic *familism*.

Relational familism. Two scales represent the construct of relational *familism*: family cohesion and parental engagement. Family cohesion was measured with a composite five-item scale (Cronbach's $\alpha = .76$; not at all to very much) that assessed the extent to which adolescents' felt that his/her family had fun together, understood him/her, paid attention to him/her, and parents cared about him/her. An additional item on how much the adolescent wanted to leave home was added to the scale and reverse coded. The parental engagement scale indicates the breadth of activities parents did with their children during the previous four weeks. This measure was constructed using

10 items that asked respondents whether they had shopped, played a sport, attended a religious service, gone out for entertainment, worked on a school project, and/or talked about a personal problem, date, party, or school project with each parent. The 10th item asked whether the adolescent had not participated in any of the above. Adolescents responded yes or no to each item for each parent. If adolescents answered no to all first nine items, the 10th item was coded as yes. Scores were summed to create a scale. The final parental engagement measure averages the scores for both parents and ranged from zero and nine, with higher scores indicating more parental engagement.

Demographic familism. Respondents were asked to answer a series of questions about each person living in the household. This roster was used to create a measure of household that is consistent with the living arrangements described in the *familism* literature. That is, it included the presence of non-parental adults who may serve as support in larger family networks. Adolescents were asked to name each person living in the household, and to provide his/her sex and relationship to self, including extended and fictive kin. Those who were classified as children, siblings, or parents of the adolescents were further classified under the specific relationship types with the adolescent (i.e., biological, step-, adopted-, foster- parent or child; full-, half-, adoptive-, foster-, other sibling). In order to better clarify the presence of additional kin in the household and to create a working typology, household members were classified as primary males and females (i.e., fathers, mothers, parents' spouse or partner), secondary males and females (i.e., grandparents, great-grandparents, aunts/uncles), and other adults or children (i.e., adolescent respondents' child, spouse/partner, sibling, siblings spouse/partner, cousins, nieces, nephews, mother- or father in-law, other

relatives, other non-relatives; those under 21 were classified as children). Households with two primary persons were classified as two parent households. Secondary males or females were considered other adults. For analysis purposes, household composition was coded as a dummy variable with values ranging from 0 through 4 with two parent families as the reference category. Other categories are: 1 - two parents with adult kin, 2 - single parent, 3 - single parent with adult kin, and 4 – adult kin with no parents.

Control variables.

Age. Age indicates years at the time of interview, which was calculated by subtracting their birth date from the day, month, and year of interview.

Sex. The sex of adolescent respondents was assessed by interviewers prior to beginning the full interview session. It is a dummy variable coded as 0 for females and 1 for males.

Family socioeconomic status. This study uses two separate measures to capture overall family economic status: mothers' education and family income. Bruce (2000) argues these measures reflect the influence of social and educational capital provided by the parents, as well as actual income. In the parental questionnaire, respondents were asked how far they had gone in school. In cases where a paternal figure responded ($n = 90$), the variable indicates how far their current female spouse or partner had gone in school. Responses ranged from 8th grade or less to graduate training beyond a 4-year college. If the respondent was the biological mother, their level of education was used. If they were another maternal figure (i.e., step mother, foster mother, adoptive mother, grandmother, aunt, or other female figure), then it was

restricted to responses for those who had lived with the adolescent for five or more years. If the respondent was the father or other paternal figure, they were asked about a resident maternal figure. Again, if this figure was not the biological mother, analysis was restricted to those whose maternal figure had lived with the adolescent for more than five years. Responses were classified as: 1 - having less than high school, 2 - having a high school diploma/GED/vocational training, 3 - completed some college, 4 - graduated from college, and 5 - having gone to a professional school beyond a 4-year college. Income was measured in thousands in a range from \$0 to \$999,000. Analysis showed this variable to be highly skewed across all racial/ethnic groups. Observations with incomes of \$999,000 were reclassified as missing data (these were given new values through the EM algorithm). Income was then log transformed it to achieve normality.

Immigrant generation. Adolescents were asked their own and their biological parents' place of birth. These were used to create both parental and adolescents immigrant generations. Respondents who were foreign-born, with foreign-born parents were classified as first generation. Those who were US-born, with at least one foreign-born parent, were classified as second-generation immigrants. Those who were US-born with US-born parents were classified as third generation and above and used as the reference group in the data analysis (Bui & Thongniramol, 2005).

Data Analysis

Given the complex sample design with unequal probability of selection and the oversampling of race/ethnic groups in the Add Health data set, all analyses include the use of appropriate weights to avoid bias. Failure to do so would result in underestimated standard errors and false-positive test results. Furthermore, descriptive and multivariate analyses were conducted using SAS 9.3 PROC SURVEY procedures, which account for the regional and school clustering in the sampling design (Chantala & Tabor, 1999). The first analytic step was to calculate descriptive statistics for the dependent and independent variables for the full sample and for each racial/ethnic subgroup, and test for differences in these variables across subgroup using ANOVAs and Chi-squares (χ^2). The second analytic step was to conduct pairwise contrasts using logistic regression to determine the specific racial/ethnic differences in the prevalence of violent behaviors to get at a more nuanced understanding of within-Latino prevalence rates. The third step was a systematic analysis of the effect of different dimension of *familism* in explaining violent behaviors after considering racial/ethnic differences. In addition, analyses were run to determine whether there were differences in the effects of independent variables on violent behaviors by racial/ethnic subgroups. The final step was to examine the role of different dimension of *familism* as protective factors against violent behaviors within racial/ethnic subgroup.

In order to maximize the sample, missing data points across all independent variables were calculated using an Estimation-Maximization (EM) algorithm. This procedure is used to calculate the maximum likelihood estimates for parameters in probabilistic models and is considered the gold standard in missing data analysis

(Raghunathan, 2004). It calculates the missing observations by using the observed data to estimate the values based on the parameter and re-estimates the distribution of the parameters with the expected estimates of the unknown data until the results converge. It is important to note that 4,208 (25%) respondents had missing values on family income, 161 (1%) on immigrant generation, 61 (0.36%) on family cohesion, 351 (2%) on parental engagement, and 188 (1%) on demographic *familism*.

Simple logistic and multivariate logistic regressions analyses were used to test the study hypotheses. In general, variables were entered in a stepwise fashion starting with controls in step one, race/ethnicity in step two, family cohesion in step three, parental engagement in step four, and the a block of all four demographic *familism* dummy variables at step five. This approach allows for the comparison of the individual impact of each block of covariates. An integral part of this study is to understand the role of the *familism* variables across racial/ethnic subgroups in an effort to improve our understanding the heterogeneity of Latino families. In order to compare across racial/ethnic subgroups, an interaction term was included for each independent variable and race/ethnicity to determine differences in the effect of each across subgroups. The final column in Table 3.3 provides the p-value for each interaction. Subsequent analysis examines the same model progression for each racial/ethnic subgroup separately to determine the relationships among variables within subgroups.

In order to compare the fit indices across models, which would help understand how much variance is explained by each, I included deviance statistics (-2 log likelihood function value [-2LL]) across each step. However, the large sample sizes and the complex sample design provide design-based, rather than model-based p-values

for individual variables that are not consistent with the -2LL model fit analysis. Thus, I opted to provide the deduction of deviance (percentage change) in the model as new variables are added to assess changes in model fit.

Results

Table 3.2 presents the results of the analysis for racial/ethnic differences in violent behaviors. Results indicate that among the full sample, 42% reported engaging in any violent behaviors during the previous year and significant differences existed across racial/ethnic subgroups, $\chi^2(1, 5) = 112.49, p < .001$. Consistent with the first hypothesis, Whites had a significantly lower prevalence of violent behaviors from all other racial/ethnic subgroups. Results show that across racial/ethnic group among this sample, 38% of Whites, 49% of Cubans, 50% of Mexicans, 58% of Puerto Ricans, and 54% of Blacks reported any violent behaviors. In order to assess differences between racial/ethnic subgroups simple (i.e., no covariates) logistic regression analyses were run specifying contrasts across them, as shown in Table 3.2.

Contrary to expectations, results indicate that although all groups differed from Whites, none of the Latino subgroups, or Blacks differed significantly from each other in their risk for violent behaviors. Further, Cubans were closer to Mexicans in their risk of violent behaviors, not Whites. Consistent with expectations, Puerto Ricans and Blacks were most alike each other in their levels of violence. Because of the number of contrasts, results were compared against Bonferonni corrected alphas, showing consistent findings. A noteworthy result is that Puerto Ricans had the highest rates of violence, followed by Blacks, Mexicans, Cubans, and Whites. Comparing them

to other Latino groups, Puerto Ricans had a 30% and 26% higher risk of violent behaviors than Cubans, although these differences were not significant.

Table 3.2. Distribution of Violence Scores and Key Independent Variables for the Full Sample, by Racial/Ethnic Group

	Full Sample	Whites	Cubans	Mexicans	Puerto Ricans	Blacks
N^a, %^b	16,615	9,911	487	1,587	585	4,045
No Violence	58	62	51	50	42	46
Any Violence	42	38	49	50	58	54
OR (95% CI)						
Cubans	--	1.55** (1.14 – 2.12)	--	--	--	--
Mexicans	--	1.63*** (1.40 – 1.90)	.951 (.648 – 1.40)	--	--	--
Puerto Ricans	--	2.22*** (1.53 – 3.21)	.701 (.428 – 1.15)	.737 (.502 – 1.08)	--	--
Blacks	--	1.89*** (1.61 – 2.22)	.824 (.589 – 1.15)	.866 (.706 – 1.06)	1.18 (.849 – 1.63)	--
Relational <i>Familism</i>^c						
Family Cohesion	3.98 (.017)	3.97 (.018)	4.09 (.157)	4.04 (.045)	3.96 (.047)	3.97 (.029)
Parental Engagement	3.57 (.037)	3.61 (.041)	3.03 (.303)	3.31 (.113)	3.59 (.177)	3.52 (.060)
Demographic <i>Familism</i>						
N^a, %^b	16,611	9,886	493	1,587	589	4,056
Two parents	63.31	71.08	49.80	55.91	51.19	35.84
Two parents with adult(s)	7.56	6.81	18.44	15.21	6.87	6.93
Single parent	16.82	13.62	14.23	15	26.15	30.17
Single parent with adult(s)	7.59	5.16	13.67	8.79	11.09	16.59
Other adult(s), no parents	4.72	3.32	3.87	5.09	4.70	10.49

***p < .001, **p < .01; ^aUnweighted sample size; ^bWeighted percentage; ^cMean and standard errors (SE); OR = Odds ratios, CI = Confidence Intervals.

With regard to the key independent variables in the multivariate analysis, the average scores for family cohesion and parental engagement were 3.98 and 3.57, respectively. Parental engagement differed by racial/ethnic subgroup, $F(4, 128) = 2.89$, $p < .05$, with Cubans having marginally lower averages scores than Whites. A weighted χ^2 analysis indicated significant differences in the household composition of adolescents by racial/ethnic subgroup, $\chi^2(16, 16,595) = 1,669.36$, $p < .001$. Sixty three percent of adolescents lived in two parent households, 7.6% lived in households with two parents and an additional adult, 16.82% in single parent households, 7.6% in one with a single parent and additional adult, and less than 5% live in households with no parental figure present.

The second research question examined the role of different elements of *familism* in violent behaviors. Table 3.3 shows the results of the analysis for the full sample. Cuban, Mexican, Puerto Rican, and Black adolescents were at higher risk of violent behaviors than their White peers, after adjusting for controls (which are all significant and in the expected directions). Introducing race/ethnicity (in model 2) showcases the ethnic differences in violent behaviors, with Puerto Ricans having had the highest risk among all groups compared to Whites. Model 3 introduces family cohesion, which reduced the odds for violent behaviors by 46.4%. Model 4 includes parental engagement, which increased the risk by 6.7% per unit increase (67% total). Model 5 includes all demographic *familism* variables. Adolescents who live without a parent in the household were at 51.4% higher odds for engaging in violent behaviors than those in two parent households. The effects of family cohesion and demographic *familism* differed significantly across racial/ethnic subgroups.

Table 3.3. Odds Ratios for Risk for Violent Behaviors

	Model 1	Model 2	Model 3	Model 4	Model 5	p ^a
OR (95% CI)						
Controls						
<i>Age</i>	.909*** (.879 - .939)	.902*** (.871 - .933)	.847*** (.819 - .875)	.847*** (.819 - .876)	.834*** (.816 - .870)	.31
<i>Male^b</i>	2.36*** (2.17 - 2.57)	2.39*** (2.20 - 2.61)	2.62*** (2.39 - 2.87)	2.70*** (2.46 - .2.96)	2.71*** (2.47 - 2.97)	.02
<i>Family Economic Resources</i>						
(log) Family Income	.722*** (.661 - .789)	.782*** (.715 - .855)	.796*** (.727 - .872)	.796*** (.727 - .872)	.814*** (.740 - .896)	.48
Mother's Education	.844*** (.807 - .883)	.851*** (.814 - .889)	.842*** (.809 - .877)	.829*** (.797 - .863)	.829*** (.796 - .863)	.09
Race/Ethnicity^c						
<i>Cubans</i>		1.31* (1.04 - 1.65)	1.44** (1.15 - 1.80)	1.49*** (1.19 - 1.87)	1.49*** (1.19 - 1.87)	
<i>Mexicans</i>		1.38** (1.13 - 1.68)	1.47*** (1.22 - 1.78)	1.49*** (1.23 - 1.81)	1.48*** (1.22 - 1.79)	
<i>Puerto Ricans</i>		1.93** (1.30 - 2.86)	1.98*** (1.33 - 2.95)	1.98*** (1.33 - 2.95)	1.96*** (1.32 - 2.90)	
<i>Blacks</i>		1.75*** (1.54 - 1.99)	1.84*** (1.61 - 2.10)	1.85*** (1.62 - 2.11)	1.80*** (1.55 - 2.04)	
Relational Familism						
<i>Family Cohesion</i>			.536*** (.500 - .575)	.517*** (.480 - .557)	.520*** (.482 - .560)	.01
<i>Parental engagement</i>				1.07*** (1.04 - 1.09)	1.07*** (1.04 - 1.10)	.40
Demographic Familism^d						
<i>Two parents and adult</i>					1.06 (.913 - 1.23)	< .001
<i>Single parent</i>					1.09 (.959-1.25)	
<i>Single parent and adult</i>					1.08 (.906 - 1.28)	
<i>Adults, no parents</i>					1.51*** (1.23 - 1.86)	
Model Fit (-2 LL)	26,053,400	25,828,683	25,059,109	25,000,731	24,968,952	
Model Fit Difference (Δdf)		224,717 (4)	769,754 (1)	58,378 (1)	31,779 (4)	
% Δ		-.86	-2.98	-.23	-.13	

*** p < .001, ** p < .01, * p < .05, OR = Odds ratios, CI = Confidence Intervals, ^a The p-value of interaction terms between race/ethnicity and independent variables to assess differences across the five populations; ^b Females are reference group; ^c Non-Latino Whites are reference group; ^d Two-parent households are reference group.

These pooled models allow an examination of how each racial/ethnic minority group differs in their risk from Whites, and the extent to which individual and family environments influence these differences. As can be seen the inclusion of the individual and family environment did not reduce these differences. The pooled models do not help us understand the extent to which the influence of *familism* may vary across racial or ethnic groups. In order to address this question, I ran stratified analyses by racial/ethnic subgroups. Results are seen in tables 3.4 through 3.8. Age was only significant for Puerto Ricans, Whites, and Blacks all whom for it decreased the odds of engaging in violent behaviors. Among Mexicans, Whites, and Blacks, males had increased odds of engaging in violence compared to females. Interestingly, males and females had similar risks of violence among Cuban and Puerto Rican youths. Family income decreased the odds of violence among Cubans, Whites, and Blacks, while mother's education only had a significant effect among Whites and Blacks. Immigrant generation was included in the models for Latino groups. Among Cubans, second generation adolescents were at increased odds compared to third generation adolescents. Among Mexicans, first generation youth were at decreased odds of violent behaviors compared to third generation Mexican youths. Immigrant generation had no effect among Puerto Ricans.

Contrary to the hypothesized associations, although family cohesion was significant among most groups, parental engagement was not significant among any of the Latino groups. Family cohesion was associated with decreases in odds among Mexicans, Whites, and Blacks. Among Cubans, it only became significant in the full model, which accounted for parental engagement and demographic *familism*. Parental engagement was associated with increased odds of violence for Whites and Blacks, but

had no effect among any of the Latino groups. In fact, including this variable in the model did not change the model fit statistics at all for any of the Latino groups.

Demographic *familism* was only significant among Cubans and Whites. For the former, living in a household with a single parent or with an adult kin, but without a parent, increased the odds of engaging in violence. Those living in households with two parents and an adult kin were at decreased odds for violence. Only White adolescents who lived in households with adult kin but no parents were at an increased odds compared to White adolescents who live in two parent households.

Table 3.4. Odds Ratios for the Risk for Violent Behaviors among White Youth

	Model 1	Model 2	Model 3	Model 4
OR (95% CI)				
Controls				
<i>Age</i>	.909*** (.878 - .941)	.850*** (.819 - .882)	.850*** (.818 - .883)	.843*** (.813 - .874)
<i>Male</i>	2.64*** (2.38 - 2.94)	2.88*** (2.58 - 3.21)	2.98*** (2.67 - 3.33)	3.01*** (2.70 - 3.36)
<i>Family Economic Resources</i>				
(log) Family Income	.755*** (.663 - .860)	.778*** (.682 - .888)	.777*** (.683 - .885)	.802** (.699 - .921)
Mother's Education	.835*** (.789 - .883)	.831*** (.789 - .875)	.810*** (.776 - .861)	.820*** (.779 - .865)
Relational Familism				
<i>Family Cohesion</i>		.529*** (.483 - .579)	.506*** (.460 - .556)	.510*** (.463 - .561)
<i>Parental engagement</i>			1.07*** (1.04 - 1.11)	1.07*** (1.04 - 1.11)
Demographic Familism				
<i>Two parents and adult</i>				1.18 (.954 - 1.46)
<i>Single parent</i>				1.08 (.901 - 1.29)
<i>Single parent and adult</i>				1.27 (.966 - 1.68)
<i>Adults, no parents</i>				1.78*** (1.29 - 2.45)
Model Fit (-2LL)	18,378,813	17,825,344	17,778,843	17,738,539
Model Fit Difference (Δdf)		553,469 (1)	46,501 (1)	40,304 (4)
% Δ		-3.01	-.261	-.227

*** p < .001, ** p < .01, * p < .05, OR= Odds ratios, CI = Confidence Intervals

Table 3.5. Odds Ratios for the Risk for Violent Behaviors among Cuban Youth

	Model 1	Model 2	Model 3	Model 4
OR (95% CI)				
Controls				
<i>Age</i>	.929 (.786 – 1.10)	.898 (.762 - 1.06)	.899 (.759 - 1.07)	.857 (.698-1.05)
<i>Male</i>	1.83 (.853 – 3.91)	1.99 (.855 - 4.62)	1.97 (.846 - 4.60)	2.18* (1.044 – 4.536)
<i>Family Economic Resources</i>				
(log) Family Income	.510*** (.347 - .750)	.529** (.335 - .835)	.529** (.336 - .833)	.637* (.414 - .983)
Mother's Education	1.17 (.974 - 1.41)	1.17 (.974 - 1.41)	1.17 (.975-1.41)	1.10 (.888 – 1.35)
<i>Immigrant Generation</i>				
First	.848 (.344 - 2.09)	.935 (.354 - 2.47)	.939 (.363 - 2.43)	.835 (.309 – 2.24)
Second	2.60* (1.12 – 6.07)	2.88* (1.18 - 7.03)	2.88* (1.19 - 7.01)	2.93* (1.29 – 6.66)
Relational Familism				
<i>Family Cohesion</i>		.789 (.609 - 1.02)	.791 (.605 - 1.04)	.776* (.604 - .999)
<i>Parental engagement</i>			.991 (.932 - 1.05)	.969 (.890 – 1.05)
Demographic Familism				
<i>Two parents and adult</i>				.492** (.302 - .800)
<i>Single parent</i>				1.82** (1.20 – 2.77)
<i>Single parent and adult</i>				1.82 (.625 – 5.30)
<i>Adults, no parents</i>				4.12*** (3.24 – 5.24)
Model Fit (-2 LL)	195,511.39	194,657.82	194,650.14	187,982.04
Model Fit Difference (Δdf)		853.57 (1)	7.68 (1)	6,668.1 (4)
% Δ		-.44	-0	-3.43

*** p < .001, ** p < .01, * p < .05, OR = Odds ratios, CI = Confidence Interval

Table 3.6. Odds Ratios for the Risk for Violent Behaviors among Mexican Youth

OR (95% CI)	Model 1	Model 2	Model 3	Model 4
Controls				
<i>Age</i>	.982 (.892 - 1.08)	.926 (.837 - 1.03)	.928 (.840 - 1.03)	.920 (.824 - 1.03)
<i>Male</i>	2.05*** (1.43 - 2.93)	2.30*** (1.60 - 3.32)	2.32*** (1.61 - 3.36)	2.33*** (1.61 - 3.37)
Family Economic Resources				
(log) Family Income	.839 (.695 - 1.01)	.857 (.699 - 1.05)	.856 (.697 - 1.05)	.852 (.698 - 1.04)
Mother's Education	1.01 (.884 - 1.15)	.951 (.818 - 1.11)	.944 (.817 - 1.09)	.936 (.798 - 1.10)
Immigrant Generation				
First	.519*** (.359 - .750)	.553** (.375 - .814)	.558** (.379 - .824)	.557** (.374 - .830)
Second	.843 (.629 - 1.13)	.796 (.589 - 1.08)	.797 (.588 - 1.08)	.793 (.582 - 1.08)
Relational Familism				
<i>Family Cohesion</i>		.518*** (.394 - .680)	.511*** (.387 - .673)	.504*** (.386 - .658)
<i>Parental engagement</i>			1.03 (.961 - 1.10)	1.03 (.956 - 1.11)
Demographic Familism				
<i>Two parents and adult</i>				.799 (.495 - 1.29)
<i>Single parent</i>				.910 (.655 - 1.27)
<i>Single parent and adult</i>				.846 (.510 - 1.40)
<i>Adults, no parents</i>				1.56 (.710 - 3.42)
Model Fit (-2 LL)	2,054,245.5	1,980,944.2	1,980,042.0	1,973,427.2
Model Fit Difference (Δdf)		73,301.3 (1)	902.2 (1)	6,614.8 (4)
% Δ		-3.57	-0	-3.3

*** p < .001, ** p < .01, * p < .05, OR = Odds ratios, CI = Confidence Intervals

Table 3.7. Odds Ratios for the Risk for Violent Behaviors among Puerto Rican Youth

OR (95% CI)	Model 1	Model 2	Model 3	Model 4
Controls				
<i>Age</i>	.762* (.618 - .940)	.748** (.600 - .932)	.747** (.598 - .933)	.761* (.608 - .951)
<i>Male</i>	1.51 (.884 - 2.57)	1.55 (.903 - 2.66)	1.55 (.911 - 2.65)	1.56 (.913 - 2.65)
<i>Family Economic Resources</i>				
(log) Family Income	.948 (.656 - 1.37)	.958 (.674 - 1.36)	.955 (.665-1.37)	.972 (.705 - 1.39)
Mother's Education	.853 (.693 - 1.05)	.847 (.694 - 1.03)	.851 (.695-1.04)	.833 (.680 - 1.02)
<i>Immigrant Generation</i>				
First	.898 (.204 - 3.96)	.890 (.185 - 4.27)	.901 (.196-4.14)	.943 (.248 - 3.58)
Second	1.24 (.622 - 2.46)	1.25 (.618 - 2.54)	1.26 (.622 - 2.55)	1.21 (.561 - 2.62)
Relational Familism				
<i>Family Cohesion</i>		.801 (.575 - 1.12)	.809 (.563 - 1.16)	.804 (.568 - 1.14)
<i>Parental engagement</i>			.986 (.885 - 1.10)	.983 (.877 - 1.10)
Demographic Familism				
<i>Two parents and adult</i>				1.36 (.576 - 3.21)
<i>Single parent</i>				1.21 (.641 - 2.28)
<i>Single parent and adult</i>				.617 (.216 - 1.76)
<i>Adults, no parents</i>				1.11 (.348 - 3.54)
Model Fit (-2LL)	452,968.77	451,218.96	451,161.18	448,106.39
Model Fit Difference (Δdf)		1,749.81 (1)	57.78 (1)	3,054.79 (4)
% Δ		-.39	-0	-.68

*** p < .001, ** p < .01, * p < .05, OR= Odds ratios, CI = Confidence Intervals

Table 3.8. Odds Ratios for the Risk for Violent Behaviors among Black Youth

OR (95% CI)	Model 1	Model 2	Model 3	Model 4
Controls				
<i>Age</i>	.868*** (.805 - .937)	.823*** (.760 - .891)	.826*** (.763 - .893)	.823*** (.761 - .890)
<i>Male</i>	1.90*** (1.59 - 2.27)	2.09*** (1.74 - 2.52)	2.16*** (1.79 - 2.59)	2.15*** (1.79 - 2.59)
<i>Family Economic Resources</i>				
(log) Family Income	.829** (.734 - .936)	.814** (.713 - .930)	.818** (.718 - .931)	.817** (.719 - .928)
Mother's Education	.829** (.737 - .932)	.816*** (.728 - .916)	.805*** (.719 - .900)	.805*** (.721 - .898)
Relational Familism				
<i>Family Cohesion</i>		.557*** (.487 - .638)	.540*** (.470 - .620)	.537*** (.467 - .617)
<i>Parental engagement</i>			1.08** (1.03 - 1.13)	1.08** (1.03 - 1.14)
Demographic Familism				
<i>Two parents and adult</i>				.889 (.522 - 1.51)
<i>Single parent</i>				1.04 (.874 - 1.24)
<i>Single parent and adult</i>				.860 (.656 - 1.13)
<i>Adults, no parents</i>				1.14 (.919 - 1.43)
Model Fit (-2LL)	4,643,029.6	4,511,471.3	4,495,742.9	4,490,260.2
Model Fit Difference (Δdf)		131,558.3 (1)	15,728.4 (1)	5,482.7 (4)
% Δ		-2.83	-.35	-12.19

*** p < .001, ** p < .01, * p < .05, OR = Odds ratios, CI = Confidence Intervals

Discussion

In 2001, the Surgeon General of the United States declared violence a national epidemic (U.S. Department of Health and Human Services [DHHS], 2001). The problem is most acute among America's youth, particularly Latinos and African Americans. A considerable amount of research has established the importance of the family environment on adolescents' violent behaviors. In order to develop intervention and prevention services that are more relevant to Latinos, Mirabal-Colón and Vélez (2006) argue that cultural factors, many which are reproduced in the family, should be considered. This study examined the distribution of violent behaviors across racial/ethnic groups in the United States, with a special emphasis on within-Latino distribution. Further, it sought to uncover the contribution of *familism* in protecting adolescents from the risk of violent behaviors. Results from the study are mixed.

Consistent with expectations, Black and Latino adolescents in the U.S. have higher rates of violence prevalence than White youth. However, the prevalence of violence is highest among Puerto Ricans, the second largest Latino group in the country. Although contrasts suggest there are no significant differences across minority groups, accounting for relational and demographic *familism* in the models did not change these findings. Other factors not included might better account for these differences, including other family, neighborhood, or school factors. Of particular interest is to examine the extent to which within-Latino variations exist in regional, multicity, and city-wide contexts. This would further our understanding of Latino immigrant youths, and inform the development of effective intervention strategies that meet the specific needs of the different populations. It is important to note that compared to estimates from the 1990 US

Census, Cuban adolescents in this sample have lower socioeconomic profiles than the Cuban population nationally (14.5% of Cuban females over 25 had completed a four year college or beyond; family income mean = \$41,619, median = \$32,417), while Puerto Rican adolescents have a higher profile than the Puerto Rican population (9.4% of Cuban females over 25 had completed a four year college or beyond; family income mean = \$27,869, median = \$21,941) as a whole (US Bureau of the Census, 1990). This suggests that, in spite of the use of weights, the results may not be strictly representative of the Cuban and Puerto Rican adolescent population in the country. Without additional information on specific details of the Carolina Population Center's oversampling techniques for these two populations for the Add Health data set, this is difficult to ascertain.

The *familism* variables showed a complex pattern of influence across the different groups. None of the variables affected the disparity between Whites and all other groups, despite being significant predictors of the risk of violence. Contrary to expectations, the family environment was not a stronger protective factor among the different Latino groups compared to Whites and Blacks. The inclusion of these variables within the model, increased, rather than decreased, the risk of violence for all racial/ethnic minority groups when compared to White peers. This finding is contrary to findings suggested in the literature. For example, in a study comparing the effects of family environment among males in New York, Smith and Krohn (1995) found that family variables accounted for twice the variance in the level of violent behaviors among Latinos, compared to White and Black peers in the area. This sample of Latinos primarily consisted of Puerto Rican youths, who were the largest Latino group in the New York

area at the time of the study. However, also using the Add Health data set, Leiber, Mack, and Featherstone (2009) found that although both Latinos and African Americans had higher risks of serious and non-serious delinquency than Whites, the effects of family processes and economic factors did not vary by race/ethnicity, providing partial support for the present findings that these factors may have similar effects across groups. Their analysis however, homogenized Latinos within a pan-ethnic label.

Within-group analyses in the present study suggest that the family environment may not be universally protective for all racial/ethnic subgroups. Family cohesion is significant among Cubans, Mexicans, Whites, and Blacks, but parental engagement is only relevant for Whites and Blacks. Demographic *familism* is only relevant for Cubans and Whites. None of the *familism* variables included in the study is relevant among Puerto Ricans. Future studies should evaluate the results of demographic *familism* among Whites and Cubans controlling for the impact of monitoring and control, independent from the composition within households. Leiber, Mack, and Featherstone (2009) found that family structure was only related to serious delinquency among African Americans in their sample, and had no effect among Latinos, Whites, or African Americans once other family processes (i.e., maternal attachment, maternal supervision, and parental control), and economic factors (i.e., public assistance and maternal employment) were accounted for. It is important to note that their measures of family structure only indicated intact (i.e., current marital status of mother was married to the biological father who living in the household) and non-intact (i.e., current marital status of mother was divorced, widowed, or never married) households. In one of the few studies that decomposes the role of family environment into variables that tap onto different aspects

of family dynamics and attitudes (i.e., involvement, social isolation, normlessness, solidarity and *familism*, parental availability, parental supervision, perceived sanctions in the family), Pabón's (1998) found that among Puerto Rican males in South Bronx only involvement (i.e., amount of time they spent with family on weekdays, evenings, and weekends) was associated with fewer delinquent behaviors. Although this sample was drawn in the 1980s, his findings support the possibility of variability in the potential influence of family dynamics on violence. The present analysis did not include a direct measure of time spent with family members, thus additional studies are needed to confirm whether similar results would be found across different Latino ethnicities.

Findings in the present study support a more nuanced understanding of the role of families across Latino subgroups. Although a majority of the violence prevention literature places the family as a source of protection and resilience among Latinos (Smith & Krohn, 1995; Rodríguez & Weisburd, 1991; Rodriguez & Kosloski, 1998), this study suggests that this assumption may need to be qualified in order to address the specific needs of different Latino populations in the country. None of the *familism* variables was found to be relevant for Puerto Rican youth, and only family cohesion had an impact among Mexicans. This may be an indication that other family environment variables may be more relevant for these groups, such as parental monitoring and control (Pabón, 1998), or that *familism* should be measured differently for different groups. Or it may also mean that for Puerto Ricans and Mexicans, who are more likely to live in economically disadvantaged communities, a strong family environment may not override the risks associated with living in a high risk community (Molnar, Cerdá, Roberts, & Buka, 2008). Future research should consider whether multiple dimensions of family environments and

how such sociocultural familial values have similar impacts for Puerto Ricans, Mexicans, Cubans, and other Latino subgroups within particular areas of the country, in light of new immigration dynamics that have fueled unprecedented growth of these populations in the country. Moreover, studies should examine the pathways by which community environments shape the risk for the different Latino groups, and how these interact with the family environment to further shape those risks.

A noteworthy finding is that parental engagement is actually associated with increased risk of violent behaviors among White and Blacks, rather than decreases, as was originally expected. Although contrary to the theoretical relationship that proposes decreased risk as a function of more parental involvement in adolescents' lives, other studies have found similar results among African Americans. For example, Walter, Maxon, and Newcomb (2007) found in a study of African American and Latino males in Los Angeles that among the former, medium to high levels of parental attachment increased the risk of violence, especially among youth who had been raised by both parents. They did not find this among Latino males. Unfortunately parent characteristics were not included in this or their study, thus, it is difficult to gauge how encouraging or discouraging are the parent-child interactions among Whites and Blacks of violence or attitudes supportive of violence.

Further, the within-group analysis found that several of the control variables do not conform to expected associations. For example, the role of gender, although not directly addressed in this study, is generally a very strong predictor of the risk of engaging in violent behaviors. Across all groups, except Puerto Ricans, males were significantly more likely to engage in violence than females in the same group. For

Cubans, males are at an increased risk, only after adjusting for all control and *familism* variables. This may reflect a high prevalence of violent behaviors among Puerto Rican and Cuban females. Further, immigrant generation affects differently the risk of Mexican and Cuban youths. Among Mexicans, immigrant youths were at a substantially lower risk of violent behaviors than third generation Mexicans. Among Cubans, it was the second generation immigrants who were at a substantially increased risk of violent behaviors than third generation Cubans. Grouping all of the Latino ethnic subgroups in the Add Health sample into a single category, Bui and Thongniramol (2005) found that second and third generation immigrants were at increased risk of violence compared to first generation immigrants for violent delinquency, but no differences were noted between the second and third generation's risk. Overall, the present findings raise questions about the role of gender and immigrant generation within each Latino subgroup. Future research should consider the combined gender/ethnicity disparities in violent behaviors and the role of the family environment in increasing or decreasing the risk of violence among these groups.

A number of study limitations merit mention. First, the *familism* measures used were limited in conceptual depth. The Add Health study did not include items that were specifically designed to measure *familism* and thus the measures in this analysis may be imperfect. It is possible that more culturally- and ethnically-specific measures should be used to better capture the effects of *familism* among ethnically diverse Latino adolescents. Using a general measure of each *familism* dimension may obscure the possibility that the three dimensions may look differently across the groups. Due to data constraints, for example, demographic *familism* did not include measures of extended kin

living in close proximity to the adolescents. This concept is particularly important for Latino families because studies have found many immigrants to choose living in close proximity to relatives or fictive kin (Domínguez & Watkins, 2003; Kamo, 2000). This type of arrangement may provide social support to both new and established families and further act as agents who reinforce the sociocultural values of their native countries (Domínguez & Watkins, 2003; Keefe, 1979). This concept, however, may vary by Latino ethnicity. For example, Cubans are more likely to live with additional family members within the same household (e.g., grandparents), while for Puerto Ricans, demographic *familism* may be more evident in living in close proximity to other family members, rather than within the same dwelling. Although in both cases these may provide additional caretakers, the latter would not be captured in a simple demographic *familism* measure that relates to family structure. Further, attitudinal and behavioral measures of *familism* should include an assessment of why adolescents engage or do not engage in particular behaviors, as well as the importance they give to family as the center of their activities, and directions given by family authority figures. Although new measures have been developed in recent years that better capture the attitudinal and behavioral dimensions of *familism* (Lugo-Steidel & Contreras, 2003; Ramírez et al., 2004), their use has been limited to small, local samples that do not allow for subgroup analysis among Latinos. This elusive concept requires more in-depth, qualitative assessments that both examines how it compares across different Latino ethnic subgroups within the United States, as well as patterns found in their countries of origin. Until this is done, most studies of within-Latino heterogeneity continue to use measures that are proxies of culturally-sanctioned attitudes and behaviors within the family. This practice may

continue to obscure the effects of different types or meanings associated with *familism* and how these relate to outcomes. This may account for the non-significant findings among Puerto Ricans and Mexicans in this study, or may suggest that other aspects of family relationships not included may yield different results.

Second, the violence measure used as outcome included different types and severity of violent acts and did not distinguish the frequency of violence. Thus factors associated with different aspects of youth violent behaviors could not be indicated. These may vary in their frequency and various factors may affect them differently as well. However, this measure is similar to others used in the youth violence literature and allowed me to capture the majority of violent acts in the sample (McNulty & Bellair, 2003). Third, this study is cross-sectional, thus causal arguments about family environments and violent behaviors across subgroups cannot be made. Rather, this study looks to identify which elements of *familism* are most important in reducing the risk of violent behaviors across racial/ethnic subgroups. Fourth, findings are based on the use of self-reported data of violent behaviors and family environments, thus subject to errors. Although, as with other sensitive information, self-reported measures of violence yield a more accurate representation of the problem among America's youths (Tourangeau & Smith, 1996), there is a potential for social desirability that may lead to under or over reporting of behaviors. The same is true for family environment characteristics. However, in this study the majority of interviews occurred in the home using computer assisted personal interviews (CAPI) and audio-computer assisted self-interviews (A-CASI) to protect answers to sensitive topics. The two methods of data recording have been shown to maximize resources and easing the process of creating comprehensive databases. More

importantly (particularly with the use of A-CASI), they protect the confidentiality of answers and decrease the effect of social desirability bias.

These findings have important implications for public health-violence prevention policies. First, it is clear that intervention efforts must take into account the differing roles of family across subgroups. For Mexicans, Whites, and Blacks interventions that address family dynamics, particularly cohesion, may have important effects in violence prevention. However, for Puerto Ricans and Cubans these interventions may have little effect and should be evaluated cautiously. By the same token, interventions aimed at family environments may have different effects for males and females across and within Latino subgroups. Additional research is needed to ascertain the potential impact of family interventions across racial/ethnic/gender subgroups.

References:

- Allison, P.D. (1999). *Logistic regression using the SAS program: Theory and application*. Cary, N.C.; SAS Institute.
- Amaro, H., & De La Torre, A. (2002). Public health needs and scientific opportunities in research on Latinas. *American Journal of Public Health*, 92(4), 525-529.
- Arcia, E., Skinner, M., Bailey, D., & Correa, V. (2001). Models of acculturation and health behaviors among Latino immigrants to the US. *Social Science & Medicine*, 53, 41-53.
- Baumrind, D. (1991). Effective parenting during the early adolescent transition. In P.A. Cowan & M. Hetherington (Eds.), *Family Transitions*, (pp.111-163). Hillsdale, NJ: Erlbaum.
- Bellair, P.E., Roscigno, V.J., & McNulty, T.L. (2003). Linking local labor market opportunity to violent adolescent delinquency. *Journal of Research in Crime and Delinquency*, 40(1), 6-33.
- Blum, R.W., Beuhring, T., Shew, M.L., Bearinger, L.H., et al. (2000). The effects of race/ethnicity, income, and family structure on adolescent risk behaviors. *American Journal of Public Health*, 90(12), 1879.
- Bronfenbrenner, U. (1988). Interacting systems in human development: Research paradigms, present and future. In N Bolger, A Caspi, & M Moorehouse, (Eds.). *Persons in context: Developmental processes*. New York, NY: Cambridge University Press.
- Bruce, M.A. (2000). *Inequality, interactional complexity, and violent delinquency: An exploration of structural, family, and individual considerations*. Institute for Research on Poverty Discussion Paper No. 1216-00, University of Wisconsin.
- Bui, H.N., & Thongniramol, O. (2005). Immigration and self-reported delinquency: The interplay of immigration generations, gender, race, and ethnicity. *Journal of Crime and Justice*, 28(2), 71-99.

- Centers for Disease Control and Prevention, (2006). Youth risk behavioral surveillance – United States, 2005. *MMWR*, 55 (SS-5).
- Chantala, K., & Tabor, J. (1999). *Strategies to perform design-based analysis using the Add Health data*. Carolina Population Center, University of North Carolina, Chapel Hill. Web site:
<http://www.cpc.unc.edu/projects/addhealth/data/using/guides/weight1.pdf>
- Dahlberg, L.L., & Krug, E.G., (2002). Violence – A global public health problem. In E.G., Krug, L.L. Dahlberg, J.A. Mercy, A.B. Zwi, & R. Lozano. *World Report on Violence and Health*. Geneva: World Health Organization.
- Daigle, L.E., Cullen, F.T., & Wright, J.P. (2007). Gender differences in the predictors of juvenile delinquency: Assessing the generality-specificity debate. *Youth Violence and Juvenile Justice*, 5(3), 254-286.
- Domínguez, S. & Watkins, C. (2003). Creating networks for survival and mobility: Social capital among African American and Latin American low-income mothers. *Social Problems*, 50(1), 111-135.
- Durand, J., Telles, E., & Flashman, J. (2006). The demographic foundations of the Latino population. National Research Council. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 66-99) Washington, DC: The National Academies Press.
- Fischer, M.J., & Tienda, M. (2006). Redrawing spatial color lines: Hispanic metropolitan dispersal, segregation, and economic opportunity. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp.66-99) Washington DC: The National Academies Press.
- Franke, TM. (2000) Adolescent violent behavior: An analysis across and within racial/ethnic groups. *Journal of Multicultural Social Work*, 8(1/2), 47-70.
- Frey, W., & Farley, R. (1996). Latino, Asian, and Black segregation in US metropolitan areas: Are multi-ethnic metros different? *Demography*, 33(1), 35-50.

- Gorman-Smith, D., Tolan, P.H., & Henry, D.B., (2000). A developmental-ecological model of the relation of family functioning to patterns of delinquency. *Journal of Quantitative Criminology*, 16, 169-198.
- Gorman-Smith, D., Henry, D.B., & Tolan, P.H. (2004). Exposure to community violence and violence perpetration: the protective effect of family functioning. *Journal of Clinical and Adolescent Psychology*, 33(3), 439-449.
- Grenier, G.J., & Pérez, L. (1996). Miami spice: the ethnic cauldron simmers. In S. Pedraza & R. Rumbaut (Eds.) *Origins and Destinies: Immigration, race, and ethnicity in America*. (pp.360-372). Belmont, CA: Wadsworth Publishing Co.
- Guerra, N.G., & Williams, K.R. (2006). Ethnicity, youth violence, and the ecology of development. In N.G. Guerra & E.P. Smith (Eds.) *Preventing youth violence in a multicultural society*. (pp. 17-45). Washington, DC: American Psychological Association.
- Halgunseth, L.C., Ispa, J.M., & Rudy, D. (2006). Parental control in Latino families: An integrated review of the literature. *Child Development*, 77(5), 1282-1297.
- Harris, K.M., Gordon-Larsen, P., Chantala, K., & Udry, R.J. (2006). Longitudinal trends in race/ethnic disparities in leading health indicators from adolescence to young adulthood. *Archives of Pediatrics & Adolescent Medicine*, 160(1), 74-81.
- Harris, K.M., Halpern, C.T., Entzel, P., Tabor, J., Bearman, P.S., & Udry, J.R. (2008). The National Longitudinal Study of Adolescent Health. Research Design. Web site: <http://www.cpn.unc.edu/projects/addhealth/design>.
- Harrison, A.O., Wilson, M.N., Pine, C.J., Chan, S.Q., Buriel, R. (1990). Family ecologies of ethnic minority children. *Child Development*, 61(2), 347-362.
- Hart, J.L, O'Toole, S.K., Price-Sharps, J.L., & Shaffer, T.W. (2007). The risk and protective factors of violent juvenile offending: An examination of gender differences. *Youth Violence and Juvenile Justice*, 5(4), 367-384.

- Hsieh, C.C., & Pugh, M.D. (1999). Poverty, income inequality, and violent crime. In I. Kawachi, B.P. Kennedy, & R.G. Wilkinson, (Eds.). (pp. 278-296) *The Society and Population Health Reader: Income Inequality and Health*. New York, NY: New York Press.
- Hunt, L.M., Schneider, S., & Comer, B. (2004). Should “acculturation” be a variable in health research? A critical review of the research on US Hispanics. *Social Science and Medicine*, 59, 973-986.
- Jelin, E. (1991). Social relations of consumption: The urban popular household. *Family, household and gender relations in Latin America*. In E. Jelin (Ed). (Pp 165-198). New York, NY: Kegan Paul International.
- Kamo, Y. (2000). Racial and ethnic differences in extended family households. *Sociological Perspectives*, 42(2), 211-229.
- Kaufman, J.M. (2005). Explaining the race/ethnicity-violence relationship: Neighborhood context and social psychological processes. *Justice Quarterly*, 22(2), 224-251.
- Keefe, S.E. (1979). Urbanization, acculturation, and extended family ties: Mexican Americans in cities. *American Ethnologist*, 6(2), 349-365.
- Landale, N.S., Oropesa R.S., & Bradatan, C. (2006). Hispanic Families in the United States: Family Structure and Process in an Era of Family Change. *National Research Council. Hispanics and the Future of America. Panel on Hispanics in the United States*. M. Tienda and F. Mitchell, (Eds.) Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 138-178) Washington, DC: The National Academies Press.
- Leiber, M.J., Mack, K.Y., & Featherstone, R.A. (2009). Family structure, family processes, economic factors, and delinquency: Similarities and differences by race and ethnicity. *Youth Violence and Juvenile Justice*, 7(2), 79-99.
- Lomnitz, L. & Pérez-Lizaur, M. (1991). Dynastic growth and survival strategies: The solidarity of Mexican grand-families. *Family, household and gender relations in Latin America*. E. Jelin (Ed). Pp 123-132. New York, NY: Kegan Paul International.

- Lugo-Steidel, A.G., & Contreras, J.M. (2003). A new *familism* scale for use with Latino populations. *Hispanic Journal of Behavioral Sciences*, 25(3), 312-330.
- Martínez, R. (2003). Moving beyond Black and White violence: Blacks, Haitians, and Latino homicides in Miami. In D.F. Hawkins, (Ed). *Violent crime: Assessing race and ethnic differences*. New York, NY: Cambridge University Press.
- Massey, D.S. & Bitterman, B. (1985). Explaining the paradox of Puerto Rican segregation. *Social Forces*, 64(2), 306-331.
- Massey, D.S., Gross, A.B., & Shibuya, K. (1994) Migration, segregation, and the geographic concentration of poverty. *American Sociological Review*, 59(June), 425-445.
- McNulty, T.L., Bellair, P.E. (2003a). Explaining racial and ethnic differences in serious adolescent violent behavior. *Criminology*, 41(3), 709-747.
- McNulty, T.L, Bellair, P.E. (2003b). Explaining racial and ethnic differences in adolescent violence: Structural disadvantage, family well-being, and social capital. *Justice Quarterly*, 20(1), 1-31.
- McNulty, T.L., Bellair, P.E. (2005). Beyond the bell curve: Community disadvantage and the explanation of Black-White differences in adolescent violence. *Criminology*, 43(4), 1135-1169.
- Mercy, J.A., Butchart, A., Farrington, D., & Cerdá, M. (2002). Youth violence. In E.G. Krug, L.L. Dahlberg, J. Mercy, A.B., Zwi, & R. Lozano (Eds.). *World report on violence and health*, (pp.23-86). Geneva: World Health Organization.
- Mirabal-Colón, B., Vélez, C.N. (2006). Youth violence prevention among Latino youth. In N.G. Guerra, & E.P. Smith (Eds.). *Preventing youth violence in a multicultural society*. (pp. 103-126) Washington, DC: American Psychological Association.
- Molnar, B.E., Cerdá, M., Roberts, A.L., & Buka, S.L. (2008). Effects of neighborhood resources on aggressive and delinquent behaviors among urban youths. *American Journal of Public Health*, 98(6), 1086-1093.

- Pabón, E. (1998). Hispanic adolescent delinquency and the family: A discussion of sociocultural influences. *Adolescence*, 33(132), 941-955.
- Portes, A., & Grosfoguel, R. (1994). Caribbean diasporas: Migration and ethnic communities. *Annals of the American Academy of Political and Social Science*, 530, 74-68.
- Raghunathan, T.E. (2004). What do we do with missing data? Some options for analysis of incomplete data. *Annual Review of Public Health*, 25, 99-117.
- Ramírez, J.R., Crano, W.C., Quist, R., Burgoon, M., Alvaro, E.M., & Grandpré, J. (2004). Acculturation, familism, and parental monitoring, and knowledge as predictors of marijuana and inhalant use in adolescents. *Psychology of Addictive Behaviors*, 18(1), 3-11.
- Reimers, C. (2006) Economic well being. *National Research Council. Hispanics and the Future of America. Panel on Hispanics in the United States*. M. Tienda and F. Mitchell, (Eds.) Committee on Population, Division of Behavioral and Social Sciences and Education. (pp.291-361) Washington, DC: The National Academies Press.
- Rodríguez, J.M., & Kosloski, K. (1998). The impact of acculturation on attitudinal *familism* in a community of Puerto Rican Americans. *Hispanic Journal of Behavioral Sciences*, 20(3): 375-391.
- Rumbaut, R. G. (2006). The making of a people. *Hispanics and the Future of America*. M. Tienda and F. Mitchell, eds. Committee on Population, Division of Behavioral and Social Science and Education. (pp.16-65) Washington, DC: The National Academy Press.
- Sabogal, F., Marin, G., Otero-Sabogal, R., VanOss Marin, B., & Pérez-Stable, E. (1987). Latino *familism* and acculturation: What changes and what doesn't? *Latino Journal of Behavioral Sciences*, 9, 397-412.
- Schwartz, S.J., Zamboanga, B.L., Rodríguez, L., & Wang, S.C. (2007). The structure of cultural identity in an ethnically diverse sample of emerging adults. *Basic and Applied Social Psychology*, 29(2), 159-173.

- Smith, E.P., & Guerra N.G. (2006). Introduction. N.G. Guerra, & E.P. Smith, (Eds.). *Preventing youth violence in a multicultural society*. Washington, DC: American Psychological Association.
- Smith C., & Krohn, M.D. (1995). Delinquency and family life among male adolescents: the role of ethnicity. *Journal of Youth and Adolescence*, 24(1), 69-93.
- Tourangeau, R. & Smith, T.W. (1996). Asking Sensitive Questions: The Impact of Data Collection Mode, Question Format, and Question Context. *Public Opinion Quarterly*, 60: 275-304.
- U.S. Bureau of the Census (1990). *Persons of Hispanic Origin in the United States*. U.S. Department of Commerce, Economics and Statistics Administration, Census 1990, 1990 CP-3-3.
- U.S. Department of Health and Human Services, U.S. Public Health Service (DHHS) (2001). *Youth violence: A report of the surgeon general*. Rockville, MD: US Department of Health and Human Services. Web site: <http://www.surgeongeneral.gov/library/youthviolence/toc.html>
- Vásquez García, H.A., García Coll, C., Erkut, S., Alarcón, O., & Tropp, L.R. (2000). Family values of Latino adolescents. M. Montero-Sieburth, & F. Villarruel, (Eds.) *Making invisible Latino adolescents visible: A critical approach to Latino diversity*. New York, NY: Falmer Press.
- Walker, S.C., Maxson, C., & Newcomb, M.N. (2007). Parenting as a moderator of minority, adolescent victimization and violent behavior in high-risk neighborhoods. *Violence and Victims*, 22(3), 304-317.
- Wilkinson, R.G., Kawachi, I., & Kennedy, B.P. (1999). Mortality, the Social Environment, Crime, and Violence. In I. Kawachi, B.P. Kennedy, & R.G. Wilkinson, (Eds.). *The Society and Population Health Reader: Income Inequality and Health*. (pp. 305-319) New York, NY: New York Press.
- Zhou, M. (1997). Segmented assimilation: Issues, Controversies, and Recent Research on the New Second Generation. *The International Migration Review*, 31(4), 975-1008.

CHAPTER 4

UNPACKING NEIGHBORHOOD SOCIOECONOMIC STATUS AND RACIAL/ETHNIC COMPOSITION IN THE RISK FOR YOUTH VIOLENCE: A MULTILEVEL ANALYSIS OF LATINO, BLACK, AND WHITE YOUTH

The literature on child and adolescent development suggests that neighborhood factors play critical roles in the initiation and progression of youth violent behaviors (Leventhal & Brooks-Gunn, 2000; Sampson, Morenoff, & Gannon-Rowley, 2002). During and following the Civil Rights Movement activists and scholars inspired by the anti-colonial struggles in the Third World, began to view the racial and economic oppression of Blacks and different Latino populations in the United States as a form of colonization that was internal to the country. Blauner (1969) asserts that the processes of internal colonialism were most acutely seen in the racial and economic isolation of people of color into poor, urban ghettos. This processes further contributed to the vast accumulation of wealth for affluent Whites who owned real estate, businesses, and other institutions within these minority neighborhoods.

In light of Wilson's (1987) seminal work *The Truly Disadvantaged* and the development of Social Disorganization Theory (SDT) (Sampson & Morenoff, 2003) within the Chicago School of Sociology, the last two decades have brought renewed interest in exploring neighborhood structural factors' influence on child and adolescent behaviors. Research that builds upon studies of urban crime and violence points to the crucial roles of neighborhoods in explaining racial/ethnic group differences in youth violent behavior (Sampson, Morenoff, & Raudenbush, 2005; Peterson & Krivo, 2005;

Sampson, Morenoff, & Gannon-Rowley, 2002). According to Morenoff, Sampson, and Raudenbush (2001: 518) this approach “draws its motivation from an intellectual tradition that seeks to explain variation in rates of crime and violence,” rather than explaining the development of violent behaviors within individuals. Most of this research has focused on difference between Black and White adolescents. More recently, differences have been examined with ethnically diverse samples.

At least two important limitations continue to constrain our understanding of youth violence among Latinos. First, the composition of this pan-ethnic category has become increasingly heterogeneous in terms of national origins, socioeconomic status, each groups’ tenure in the United States, immigration experiences, geographic concentration, and political clout (Rumbaut, 2006; Durand, Telles, & Flashman, 2006; Fischer & Tienda, 2006; Portes & Grosfoguel, 1994). The changing demographic composition and the unique economic and spatial assimilation processes experienced by different immigrant groups raise important questions about the role of ethnicity (for the purpose of this discussion ethnicity refers to national origin) in shaping Latino adolescents’ behaviors. The role of residential context, although vastly used to explore White-Black differences in youth violence, has seldom been used to explore *within-* Latino rates of violence. Various paths of economic mobility and residential segregation may affect Latino ethnic groups differently. Differential processes of assimilation into the United States may be key to understanding the experiences of immigrants and children of immigrants in the country. However, these issues seldom have been explored in conjunction with understanding violence among Latino youth.

The second limitation of current social science literature is the use of single measures of neighborhood socioeconomic status that include both economic and racial/ethnic composition indicators. This practice is fairly common, but it obscures the unique paths of economic and spatial assimilation for immigrant communities. Living in neighborhoods with different combinations of socioeconomic and racial/ethnic composition may afford various levels of exposure to important risk or protective influences on adolescents' behaviors. The lack of information pertaining to within-group differences in risk and protective factors among this pan-ethnic population has ultimately hindered the development of effective responses to violence. The purpose of this study is to understand the role of neighborhood socioeconomic status and racial/ethnic composition in explaining the risk for youth violence in a racially/ethnically diverse, national sample. In doing so it looks to understand how neighborhood contexts shape protective and risk factors for youth violence. Furthermore, it assesses whether these factors impact the various racial/ethnic groups in similar ways.

Neighborhood Characteristics and Youth Violence

The guiding framework for this study is the ecological systems theory, which highlights the dynamic social, historical, and cultural milieus where people relate through multiple systems (or levels) of interaction (micro-, meso-, exo-, macro-, and chronosystems) (Bronfenbrenner, 1988). Of particular importance to this study are different elements of the microsystem. This system contains all direct relationships and interactions a person has with his or her immediate surroundings (e.g., family, school, neighborhood, work) and it has the strongest, bidirectional influence on a person's

development. The mesosystem, which refers to the interactions of factors within and across microsystems, is critical in ecological theory. This framework allows for the incorporation of different theories to explain links within and across systems. One widely used theory in sociology and public health that is especially important for neighborhood influences on violent behaviors is Social Disorganization Theory (SDT).

Classic SDT highlights several neighborhood structural factors as relevant to explaining racial differences in crime and violence outcomes: socioeconomic status, racial/ethnic composition, family structure and life cycle, and residential stability, (Sampson, 2003). In particular, SDT views high rates of poverty, single parent families, residential turnover, unemployment, and racial/ethnic heterogeneity as important determinants of “concentrated disadvantage”. Sampson, Morenoff, and Gannon-Rowley (2002) have noted that these types of measures of disadvantage are related to a range of outcomes and tend to cluster spatially. Massey argued that residential segregation and economic disadvantage interact to create structural conditions that reinforce deprivation. Segregation leads to the spatial concentration of poverty, wealth, and social relationships that result in racially patterned and geographically clustered inequality (Massey, 1990; 1994). Of particular interest to understanding the experiences of Latino immigrant groups are socioeconomic status and racial/ethnic heterogeneity within their neighborhoods. The spatial concentration of poverty and wealth influences the neighborhood context through the availability and quality of institutional resources and the presence of stressors that affect social relationships (e.g., drug trafficking, arson, police interactions) (Schulz & Northridge, 2004; Wilson, 1987). In turn, communities have significant influence on families, adolescents’ relationships with other peers, and may directly impact the

opportunity for violent encounters. SDT views neighborhood disadvantage and advantage as being on a continuum of socioeconomic status, yet most research has focused on understanding the role of economic disadvantage and virtually ignores the influence of economic advantage in explaining outcomes.

A critical point to consider about classic SDT is that it views racial/ethnic heterogeneity in a community as a negative factor because it “generates diversity in cultural values and norms.... undermines communication between neighbors and the level of consensus achieved within the neighborhood about appropriate goals and standards of behavior” (Elliot et al., 1996; 393). This then leads to more residential turnover and limited social resources and political power that result in fewer institutional investments. However, many studies guided by SDT include the proportion of the population who is Black, a proxy for the homogeneity created through residential segregation, as an indicator of disadvantage. The literature on residential segregation of minority groups implicitly and explicitly argues that segregation is a detrimental factor for their economic and social assimilation (Massey & Denton, 1985). Classic SDT’s viewpoint implies that for Whites, racial/ethnic heterogeneity of neighborhoods is detrimental, but for Blacks, it is homogeneity that is detrimental. Sampson and colleagues (2002) noted in their review of the neighborhood-effects literature that fewer studies have explored racial/ethnic heterogeneity in comparison to other measures of disadvantage (e.g., proportion of population/families under poverty line, proportion of population who is Black/African American, and single parent families/female headed households).

Stemming from the urgency to understand the simultaneous concentration of poverty and racial residential isolation that was brought to the forefront by Wilson

(1987), many contemporary studies of inequalities in violent behaviors based on newer conceptualizations of SDT, include a measure of the proportion of the population that is Black along with economic indicators in their indices of neighborhood disadvantage or deprivation (Bruce, 2003; De Coster, Heimer, & Wittrock, 2006). Even in studies that specifically examined the risk of violent behaviors across neighborhoods of different socioeconomic statuses, the percent of the population that is Black was included as an indicator in a composite measure (Beyers, Loeber, Wilkström, & Stouthamer-Loeber, 2001).

This mixing of racial/ethnic and socioeconomic indicators within indices is problematic when trying to disentangle the pathways and effects of two different fundamental causes of health. Newer conceptualizations of SDT imply that there is some agreement about an interactive effect of socioeconomic status and racial/ethnic composition of a neighborhood. Yet the methodological approaches that stem from these conceptualizations do not treat them independently, thus they continue to ignore the potential for differential pathways based on socioeconomic status and racial/ethnic composition. This is a serious limitation of the literature, particularly as it relates to understanding youth violence among Latino subgroups. As immigrants, they have been characterized to have different socioeconomic profiles (some groups living in economically vibrant communities, while others live in economically disadvantaged communities), and to live in neighborhoods with different racial/ethnic compositions that may not easily follow the patterns found in research examining White-Black differences in violence (Portes & Zhou, 1993). The following section highlights potential sources of

variations of neighborhood risk and protective factors among diverse Latino immigrant groups.

Variations of Neighborhood Factors Across Latino Ethnic Subgroups

Both racial/ethnic composition and socioeconomic status are identified in the SDT literature as important neighborhood dimensions that may help explain violence disparities between Whites and different minority groups in the United States. Considering the connections proposed in the ecological systems theory, research in sociology and public health has found broad support that the spatial concentration of socioeconomic disadvantage and racial/ethnic composition have important implications for adolescents' development and behavioral outcomes (Leventhal & Brooks-Gunn, 2000; Sampson, Morenoff, & Gannon-Rowley, 2002). Both socioeconomic status of neighborhoods and residential segregation shape the exposure to health demoting and promoting factors across populations, and thus, are *fundamental* causes of health (Link & Phelan, 2000; Williams & Collins, 2001). These concepts are critical to understanding racial/ethnic disparities because they have been identified as key indicators of structural assimilation of immigrant populations into American society (South, Crowder, & Chávez, 2005). However, although there is a fairly consistent association between socioeconomic disadvantage and crime/violence at the neighborhood level, the effect of racial/ethnic composition (i.e., homogeneity vs. heterogeneity) may differ by racial/ethnic subgroup because segregation may mean different things for different racial/ethnic groups.

Sociological theories that examine the new second generation of immigrants shed light on sources of differences among Latino ethnic subgroups. In classic assimilation (or straight-line assimilation) theory, Gordon (1964) stressed that successful adaptation required structural assimilation by the incorporation of immigrant groups into the social and economic institutions of the dominant group. Specifically, this type of assimilation points to the development of direct contacts and affiliations of members of the minority and majority groups. According to Gordon, once this happens, all other forms of assimilation follow. Spatial assimilation (i.e., the incorporation of immigrant groups that leads to more heterogeneous neighborhoods) enhances other forms of structural assimilation, including intermarriage and co-ethnic friendships. Consistent with this view of assimilation, Alba and Nee (1997) argued that economic assimilation is an important incentive for structural assimilation. Since then, others have argued that spatial and economic assimilation are inextricably tied, especially among racial minorities (Massey & Denton, 1985; Santiago & Wilder, 1991; Santiago & Galster, 1995; South, Crowder, & Chávez, 2005). In classic assimilation, subsequent generations of immigrants “melt” into dominant socioeconomic and cultural standards in a straight-line.

Segmented assimilation theorists, however, argue that the different Latino groups have not uniformly experienced upward mobility. This is in part due to a continuous stream of new immigrants moving into communities, more racial diversity among these new groups, and the restructuring of the American economy pushing many into low-wage, service sector jobs with little opportunity for upward mobility (Portes & Zhou, 1993). As a result some groups have experienced downward mobility with increases in poverty, residential segregation, and negative health outcomes in subsequent generations

(Portes, Fernández-Kelly, & Haller, 2005). Others have experienced upward economic mobility while living in homogeneous or highly segregated neighborhoods (Zhou, 1997). Studies show that segregation from Whites has increased for all Latinos since the 1980s (Logan, Stults, & Farley, 2004), yet different subgroups have not uniformly experienced similar levels of economic marginalization (Reimers, 2006; Fischer & Tienda, 2006).

A large body of work has examined residential segregation within and across Latinos, non-Latino Whites, and non-Latino Blacks in the United States, pointing to three general findings. First, as a whole, the levels of segregation from Whites among Latinos are lower than the levels of segregation for Blacks, despite increases in segregation among the former and decreases among the latter during the last two decades (Logan, Stults, & Farley, 2004). Second, the degree of segregation decreases as the socioeconomic status of Latinos increases, and is lower among U.S.-born Latinos than foreign-born ones (Denton & Massey, 1988; Fischer & Tienda, 2006). Third, levels of segregation vary by geographic region of the country, which are characterized by different Latino populations and economic structures (Frey & Farley, 1996; Fischer & Tienda, 2006). Evidence suggests that the Latino-White segregation is lowest in the Southwest portion of the country where Mexicans are the predominant group; while it is highest in the Midwest and Northeast where Puerto Ricans are the predominant group. Florida, where there is a very large Cuban community, also has a high level of Latino segregation from Whites (Alba & Logan, 1993; González Wahl, Breckenridge, & Gunkel, 2006).

Consistent findings of higher levels of segregation and economic disadvantage among Puerto Ricans suggest that this group has undergone downward assimilation,

sharing poor, urban spaces with other Puerto Ricans and/or African Americans (Massey & Bitterman, 1985; Massey & Mullan, 1984; Santiago, 1992; Santiago & Galster, 1995). Because of the long history of residential segregation of African Americans resulting from institutionalized forms of discrimination that limit access to structural opportunities and resources, Latinos living in predominantly Black areas may be subject to similar levels of economic and institutional marginalization. Cubans have been described as a group with moderately high levels of segregation from both Whites and Blacks (Logan, Alba, McNulty, & Fisher, 1996; Alba & Logan, 1993), while at the same time having higher levels of education and lower family poverty rates than Whites (Reimers, 2006). This suggests the presence of an ethnic enclave that allows for upward economic mobility without sacrificing the social support and networks that are present in their ethnically homogeneous communities (Portes & Zhou, 1993). Mexicans have shown most consistency with straight-line assimilation, with subsequent generations generally achieving better economic status than previous ones (Alba & Logan, 1993; Massey, 1981; Massey, 1983; Fischer & Tienda, 2006).

Building upon SDT and the theory of segmented assimilation, I argue that neighborhood socioeconomic status and racial/ethnic composition may have an interactive effect, rather than a cumulative one, on the risk for violent behaviors among Latino youths. The commonly used measures discussed above mask the possibility that among some Latino groups, racial/ethnic homogeneity may reduce violence at different levels of socioeconomic status, while for others it may increase it. Such a finding may be reflective of ethnic enclave communities that serve as: a) sources of economic capital; b) active social networks of people who participate in civic/cultural activities, thus

increasing the potential of collective efficacy, and; c) a way to maintain a bicultural identity through the constant contact with both adolescents' native country and American influences. Recent studies of the spatial and economic assimilation of Latino immigrants highlight important differences in social contexts encountered by different ethnic subgroups (Rumbaut, 2006; Landale, Oropesa, & Bradatan, 2006; Reimers, 2006; Fisher & Tienda, 2006), suggesting that they are exposed to different levels of risk. This study examines the association between both neighborhood socioeconomic status and racial/ethnic composition (neighborhood heterogeneity vs. homogeneity) on adolescents' violent behaviors and how these interact to increase or decrease risk across a racially/ethnically diverse sample. Specifically, the following research questions will be addressed:

What influence do neighborhood socioeconomic status and racial/ethnic composition have on the risk for violent behaviors among a racially/ethnically diverse sample?

Since the 1980s, work that explores contextual factors on adolescent outcomes has focused on the effects of concentrated poverty or disadvantage. More recently, Sampson (2001), Massey (2001), and Leventhal and Brooks-Gunn (2001) have called for research that explores concentrated affluence as well as poverty in analytic models. Because of the socioeconomic diversity among Latino populations, I examine the association of youth violence with increases in socioeconomic advantage, and expect a negative association between these concepts.

It is not clear from the literature what type of influence primary racial/ethnic composition in a neighborhood should have among Latinos. I expect the effect of neighborhood characteristics to vary by racial/ethnic subgroup given theories of

segmented assimilation. Classic SDT argues that ethnic heterogeneity is detrimental to social relationships and is likely to increase the risk for violence. This study will examine whether neighborhood racial/ethnic homogeneity vis-à-vis heterogeneity places youths at risk for violent behaviors. Specifically, it will compare the risk among youths living in primarily White neighborhoods, to the risk for violent behaviors in primarily Black, Latino, and mixed neighborhoods.

Does racial/ethnic composition of the neighborhood moderate the association between neighborhood socioeconomic status and the risk of youth violence among a racially/ethnically diverse sample?

I expect that neighborhood racial/ethnic composition will moderate the neighborhood socioeconomic status-violence association. According to the theory of segmented assimilation, these processes have created different socioeconomic profiles across Cuban, Mexican, and Puerto Rican populations. According to SDT, neighborhood socioeconomic status and neighborhood racial/ethnic composition both are likely to have an important direct effect on the risk for violent behaviors among adolescents of different racial/ethnic backgrounds. However, I expect neighborhood socioeconomic affluence to have different effects in primarily Latino and Black neighborhoods, compared to primarily White neighborhoods on decreasing the risk for adolescents' violent behaviors. This may reflect differential processes of economic and spatial assimilation.

Method

Study Design

The data for this study come from the National Longitudinal Study of Adolescents Health (Add Health; Harris et al., 2008), a longitudinal study of health related behaviors among adolescents. It utilized a complex sampling design with unequal probability of selection. Schools are the primary sampling units, with 132 middle and high schools selected for the study. The schools were representative in terms of region of the country, urbanicity, size of student body, type (e.g., public, private, and Catholic), and ethnic distribution of student body. Student selection was stratified by grade and sex. Approximately 17 students were chosen at random for each grade/sex stratum for an average of 200 adolescents from each school. Post-stratification weights were used to achieve nationally representative results and to adjust for non-response.

Add Health began with an in-school survey of over 90,000 students in grades 7 through 12, followed by a series of in-home interviews with 20,745 adolescents and their primary caretaker in 1994. The data used in the current study comes from the in-home interviews at Wave I (1994-95), which had a 78.9% response rate. All students registered at the schools were eligible to complete the in-home portion of the study, including those who had completed the in-school questionnaire. The Carolina Population Center used geocoding to link adolescents' home address to 1990 Census data files. Approximately 75% of in-home respondents had geocodable street addresses. In cases where they did not, Geographic Positioning System (GPS) devices were used to collect the coordinates, providing contextual information for 98% of respondents.

The location information was transformed into a geographic distribution of adolescent respondents around a central point in the community.

A major advantage of this data set is that Puerto Rican, Cuban, and Black adolescents with highly educated parents were oversampled so that a more nuanced subgroup analysis could be conducted. For this study the full sample includes only those who identified as non-Latino Whites, Africans/Caribbean Blacks/African Americans, Cubans/Cuban Americans, Mexicans/Chicano/Mexican Americans (hereafter referred to as Whites, Blacks, Cubans, and Mexicans), and Puerto Ricans. Although the Add Health data set includes Latinos of other national backgrounds (e.g., Honduras, Dominican Republic, El Salvador), sample sizes were not large enough to conduct subgroup analysis. Therefore, they are not included in this study. Further, the 2,125 (11.23% of the total sample) respondents who did not identify within the previous five racial/ethnic groups that are the focus of this study (e.g., Asians, Hawaiian/Pacific Islanders, and Native Americans) are not included, making 16,799 adolescents in the sample were eligible for analysis.

Those who had missing violence scores ($n = 184$) were excluded from analysis, for a final sample size of 16,615, weighted to represent 20,201,502 adolescents in the country. ANOVAs were conducted to test for mean differences between those with and without violence scores. Analyses revealed that those not included were more likely to be male, $F(1, 16,797) = 20.02, p < .001$, and have mothers with lower levels of education, $F(1, 13,317) = 15.02, p < .001$. They were also less likely to be White, $F(1, 16,797) = 21.12, p < .001$, and more likely to be Cuban, $F(1, 16,797) = 3.974, p < .05$, Mexican, $F(1, 16,797) = 11.137, p < .001$, or Black $F(1,$

16,797) = 4.34, $p < .05$. Respondents also differed in neighborhood socioeconomic status, with higher levels of families in poverty, $F(1, 16,633) = 8.22$, $p < .01$, and unemployment rates, $F(1, 16,628) = 23.17$, $p < .001$. Those with missing data were less likely to live in primarily White neighborhoods, $F(1, 16,797) = 15.01$, $p < .001$, and more likely to live in mixed ones, $F(1, 16,797) = 6.32$, $p < .05$. Those missing were also more likely to live in tracts with fewer owner-occupied homes, $F(1, 16,633) = 15.79$, $p < .001$, and a higher proportion of immigrants $F(1, 16,642) = 6.63$, $p < .01$.

Sample Description

Table 4.1 shows the average proportion and standard errors of socio-demographic characteristics for the total sample and by racial/ethnic groups. Results indicate that among the full sample, 51% of respondents were male and the average age was 15.99. Cubans made up .77% of the sample, Puerto Ricans 1.7%, Mexicans 7.6%, non-Latino Blacks 17.3%, and non-Latino Whites 72.6%. Groups differed by age, with Blacks being slightly older than the average. The majority of respondents' mothers (or resident maternal figure) had completed at least a high school education, although each level of education differed by racial/ethnic subgroup. Fifty one percent of all adolescents had mothers' who had completed some college or beyond, while 15% had not completed high school. A larger proportion of White adolescents' mothers (55%) had some college education or more, followed by levels among Blacks (44%), Puerto Ricans (33%), Cubans (27%), and Mexicans (25%), $\chi^2(4, 13,176) = 109.24$, $p < .001$. At the other extreme, the majority of Mexicans (54%) adolescents' mothers had not

completed high school, followed by Cubans (43%), Puerto Ricans (29%), Blacks (21%), and Whites (10%), $\chi^2(4, 13,176) = 225.29, p < .001$.

Table 4.1 also shows that there were also differences in the distribution of demographic *familism* among adolescents by racial/ethnic subgroup. Sixty three percent of adolescents lived in two parent households, $\chi^2(4, 16,446) = 348.50, p < .001$, 8% lived in households with two parents and an additional adult, $\chi^2(4, 16,446) = 111.58, p < .001$, 17% in single parent households, 8% in one with a single parent and additional adult, $\chi^2(4, 16,446) = 177.70, p < .001$, and less than 5% lived in households with no parental figure present, $\chi^2(4, 16,446) = 98.67, p < .001$. Among Latinos, Mexicans had the highest proportion of adolescents living in two-parent households, followed by Cubans. Mexicans and Cubans had a higher proportion of adolescents living in two-parent households with an additional adult kin than Puerto Ricans. Puerto Ricans had the highest proportion of single parent households among all Latino groups. After Blacks in the sample, Cubans had the highest rates of adolescents living in single parent households with an additional adult kin of the Latino groups, while Puerto Ricans were most likely to live in households with no parent present.

Table 4.1. Sample Description, Full Sample and by Racial/Ethnic Group

	Full Sample	Whites	Cubans	Mexicans	Puerto Ricans	Blacks
Mean (S.E.)						
Age***	15.99 (.119)	15.94 (.130)	16.09 (.793)	16.00 (.277)	15.90 (.368)	16.20 (.214)
Males N(%)	10,219,385 (51)	7,444,116 (51)	73,367 (47)	782,615 (51)	186,792 (53)	1,732,495 (50)
Mother's Education						
N	16,331,713	12,043,882	139,704	1,154,963	286,829	2,594,628
Less than high school***	.154 (.013)	.099 (.009)	.430 (.001)	.541 (.043)	.290 (.031)	.207 (.024)
High school/ GED***	.340 (.012)	.350 (.013)	.299 (.022)	.209 (.027)	.378 (.025)	.346 (.020)
Some college and beyond***	.507 (.018)	.551 (.018)	.271 (.050)	.251 (.025)	.331 (.037)	.446 (.035)
Demographic familism						
% (S.E.)						
N	19,972,863	14,518,367	154,273	1,508,356	344,784	3,445,012
Two parents***	.633 (.013)	.711 (.009)	.503 (.051)	.563 (.023)	.507 (.037)	.356 (.017)
Two parents & adult(s)***	.075 (.004)	.068 (.004)	.187 (.017)	.151 (.018)	.070 (.014)	.069 (.006)
Single parent***	.168 (.007)	.136 (.005)	.144 (.015)	.147 (.018)	.266 (.035)	.301 (.015)
Single parent & adult(s)***	.076 (.005)	.052 (.004)	.138 (.023)	.088 (.011)	.109 (.027)	.167 (.011)
Other adult(s), no parents***	.046 (.004)	.034 (.003)	.028 (.017)	.051 (.007)	.048 (.010)	.106 (.008)

*** p < .001, ** p < .01, * p < .05 differences by adolescents' race/ethnic subgroup. All analyses are weighted to achieve nationally representative results. S.E. = Standard Errors

Measures

Violent behaviors.

A five-item scale assesses the frequency of violent behaviors during the previous 12 months. Specifically, items measured the frequency for each respondent of having engaged in physical fights, injured someone in a fight, took part in a group fight, pulled a knife or gun on someone, and shot and/or stabbed someone. Items include

actions of different severity, thus their response categories differed based on the assumption that more severe actions happen less frequently (never, 1 or 2 times, 3 or 4 times, 5 or more times; never, once, or more than once). Given the different response categories, and following Bellair, Roscigno, and McNulty (2003) methodology with the Add Health data set, each item's response was coded as a binary outcome. The final scale is the sum of the responses to each item, ending up with a 0 to 5 score. This allowed the assessment of different types of violent behaviors, rather than the total number of acts committed. The histogram of residuals indicated a positively skewed distribution, which suggests that those with highest violence score were not properly identified. Therefore, a binary variable indicating no violence versus any violent behaviors was used for all analyses in this study for ease of interpretation (Allison, 1999).

Race and ethnicity.

Respondents were first asked if they were of Hispanic or Latino origin (yes/no). Those who answered yes were then asked to identify their Latino/Hispanic background. Those who reported being Mexican, Mexican-American, Chicano/a, Puerto Rican, and/or Cuban/Cuban American were classified as such and included in the Latino analysis. All respondents were then asked to indicate their racial background (White, black/African American, Indian/Native American, Asian/Pacific Islander, other), to which they could give more than one answer. Over 90% of the sample chose one racial category; however, those that did not were later asked which racial group was their primary identification. Following McNulty and Bellair's (2003) classification,

those who responded ‘no’ to the Hispanic/Latino ethnicity were coded with their racial classification response. Those who reported more than one racial category were coded based on their answer to their primary identification. The final sample includes those who self-reported as Non-Latino White, Non-Latino Black, Mexican/Mexican American, Chicano/a, Puerto Rican, and Cuban/Cuban American. Respondents who identified as Mexican/Mexican American and Chicano/a were classified under a single category. For this study, they were coded as dummy variables as follows: 0 – Non-Latino Whites, 1 – Cubans/Cuban Americans, 2 – Mexican/Mexican Americans/Chicanos, 3 – Puerto Ricans, and 4 – Non-Latino Blacks. Although the focus of this study is to understand differences across the different Latino groups, the largest group in the study is Whites. For statistical reasons this group is the reference group for all analysis.

Individual control variables.

The literature on youth violence has identified individual factors that have been strongly associated with the risk of violent behaviors, including age, sex, family socioeconomic status, and demographic *familism* (Blum et al., 2000). In this study these factors were included as control variables in order to more accurately portray the risk of violence among racially/ethnically diverse youths.

Age. Age indicates years at the time of interview, which was calculated by subtracting their birth date from the day, month, and year of interview.

Sex. The sex of adolescent respondents was assessed by interviewers prior to beginning the full interview session. It is a dummy variable coded as 0 for females and 1 for males.

Family socioeconomic status. This study uses mothers' education as a measure of the protective effect of social and educational capital provided by parents. Mothers were the preferred respondent for the parental questionnaire and are overwhelmingly more likely to be the primary caregiver of respondents. In the parental questionnaire, respondents were asked how far they had gone in school. If the respondent was the biological mother, their level of education was used. If they were another maternal figure (i.e., step mother, foster mother, adoptive mother, grandmother, aunt, or other female figure), it was restricted to responses for those who had lived with the adolescent for five or more years. If the respondent was the father or other paternal figure, they were asked about a resident maternal figure. Again, if this figure was not the biological mother, analysis was restricted to those whose maternal figure had lived with the adolescent for more than five years. Responses ranged from 8th grade or less to graduate training beyond a 4-year college and were classified into different dummy variables that represent: 0 - less than high school, 1 - high school diploma/GED/vocational training, and 2 - completed some college education or beyond.

Demographic familism. A large body of work has established the link between household composition and adolescents' risk for violence (Blum et al., 2000; Leiber, Mack, & Feathersome, 2009). Respondents were asked to answer a series of questions about each person living in the household. This roster was used to create a measure of

household that is consistent with the living arrangements described in the *familism* literature. That is, including the presence of non-parental adults who may serve as support in larger family networks. Adolescents were asked to name each person living in the household, and to provide his/her sex and relationship to self, including extended and fictive kin. Those who were classified as children, siblings, or parents of the adolescents were further classified under the specific relationship types with the adolescent (i.e., biological, step-, adopted-, foster- parent or child; full-, half-, adoptive-, foster-, other sibling). In order to better clarify the presence of additional kin in the household and to create a working typology, household members were classified as primary males and females (i.e., fathers, mothers, parents' spouse or partner), secondary males and females (i.e., grandparents, great-grandparents, aunts/uncles), and other adults or children (i.e., adolescent respondents' child, spouse/partner, sibling, siblings spouse/partner, cousins, nieces, nephews, mother- or father in-law, other relatives, other non-relatives; those under 21 were classified as children). Households with two primary parents were classified as two parent households. Secondary males or females were considered other adults. For analysis purposes, household composition is a dummy variable coded 0 through 4 with two parent families as the reference category. Other categories are: 1 - two parents with adult kin, 2 - single parent, 3 - single parent with adult kin, and 4 – adult kin with no parents.

Neighborhood context.

Add Health provides information regarding the community context for the in-home sample respondents, most of which have been extensively used in the literature

from a deficit perspective. In this dissertation, I have chosen to focus on the structural conditions of neighborhoods, through use of census tracts, with particular focus on neighborhood racial/ethnic composition and socioeconomic status.

Neighborhood socioeconomic status. Principal components factor analysis was conducted using the proportion of the population 25 years and older with a college degree, the proportion of those employed in managerial and/or professional occupations, the proportion of persons under the poverty line, and the total unemployment rate (the last two reversed) to create an standardized index that included factors representing both sides of the socioeconomic status (disadvantage/advantaged) continuum (Cronbach's $\alpha = .87$). The four items loaded into a single factor, with all lambdas over .81. Higher values represent higher level of economic advantage and have a minimum and maximum value of -5.17 to 3.48 respectively (range = 8.65).

Neighborhood racial/ethnic composition. Racial/ethnic composition in a neighborhood indicates which of the major racial groups (Whites, Blacks, or Latinos) predominates in any given census tract. The Census information linked to Add Health provides separate information for the proportion of different races at the tract level. Latino identification is treated as an ethnicity allowing them to be distributed across all Census racial groups. Thus, the first step was to construct mutually exclusive categories that would represent Latinos of all races, non-Latino Whites, non-Latino Blacks, and non-Latino others. Using these continuous variables, and following the cut-off points used to stratify neighborhoods in the Project of Human Development and Chicago Neighborhoods (PHDCN; Earls & Buka, 1997), variables were created for tracts with at least 75% White population, 75% Black, and 75% Latino as homogeneous

neighborhoods. Tracts with more than 20% of at least two groups and, thus, less than 75% of any one group, were classified as mixed neighborhoods. Dummy variables are coded as primarily: 0 - White, 1 - Black, 2 - Latino, and 3 - mixed neighborhoods.

Neighborhood control variables.

A number of important factors of neighborhoods have been linked to racial and ethnic differences in youth violence, among them residential stability and the proportion of 1st generation immigrants in a neighborhood. These were included as control variables in the multivariate analyses.

Residential stability. Residential stability has been identified in a large segment of the literature as affecting both the structural dimensions of neighborhoods, as well as the social interactions between neighbors. A standardized residential stability score was created using the proportion of owner-occupied household units and the proportion of the population that had lived in the household five or more years (Cronbach's $\alpha = .62$). Principal components factor analysis confirmed these items to load on a single factor with lambdas above .85. I expect that living in neighborhoods with higher levels of residential stability will be associated with less youth violence among adolescents in the sample.

Immigrant concentration. Sampson, Morenoff, and Raudenbush (2005) found that the proportion of foreign-born persons in a community was associated with lower rates of youth violence among Mexicans in Chicago, but it increased the risk among Puerto Ricans/Other Latinos in the city. Studies looking at immigrant generation and violent behaviors have found later generations (3+) to have higher rates of violence

than 1st and 1.5 generation Hispanic immigrants (Bui & Thongniramol, 2005).

Considering these findings, the presence of first generation immigrants was included as a neighborhood level control variable and indicates the proportion of the population who is foreign-born in a census tract.

Data Analysis

The complex sampling design of Add Health created a structure where students were clustered within schools, which were the primary sampling units. Ignoring the complex clustering would underestimate standard errors, increasing the probability of a false-positive test. Thus, to test the research questions, analyses were conducted using hierarchical two-level (HLM2) Bernoulli model for binary outcomes in HLM 6 (Raudenbush & Byrk, 2002), one of several software programs with multilevel capabilities (e.g., MLWin, MIXOR/MIXREG, STATA, S plus, R). This analytical technique has several advantages. First, it allows partitioning the variance into within- and between-school components (Raudenbush & Byrk, 2002; Diez-Roux, 2000). Second, it provides a corrected estimation of standard errors, confidence intervals, and significance tests. The HLM2 module in HLM 6 further allowed analyses to be weighted in order to achieve nationally representative results. It is important to note, however, that currently no weights exist for the neighborhood variables *per se*, so descriptive information on neighborhoods should not be interpreted as being representative of all neighborhoods in the country. Due to this, and given the primary clustering of respondents through schools, schools were used as the source of level-2 variance and neighborhood factors were included at level-1.

In order to assess the main and interacting effects of neighborhood factors in explaining differences in risk among the sample, the analyses were conducted in a systematic manner. The first analytic step was to calculate descriptive statistics for the dependent and independent variables for the full sample and for each racial/ethnic subgroup, and to test for differences in independent variables across subgroup using ANOVAs and Chi-squares (χ^2). The second step was to compare the risk of engaging in violent behaviors across racial/ethnic subgroups using a multilevel model that accounts for school clustering. The third step was to conduct a systematic analysis of the effects of neighborhood factors on the risk of violent behaviors among the sample, after controlling for individual covariates. An unconditional model (i.e., no predictor variables) was first used to examine the variance attributed to school clustering. Variables were then entered in a stepwise fashion starting with individual controls in step one, race/ethnicity indicators in step two, neighborhood controls in step three, neighborhood socioeconomic status and racial/ethnic composition indicators in step four, and interactions between neighborhood socioeconomic status and each racial/ethnic composition indicator in step five. This approach allows for a comparison of the impact of each block of covariates. The equations for the unconditional and full models are presented below. All slopes are fixed for the sake of parsimony in the analyses.

Null Model

$$\eta_{ij} = \log(p/1-p) = \beta_{0j}$$

$$\beta_{0j} = \gamma_{00} + u_{0j}, u_{0j} \sim N(0, \tau_{00})$$

Where γ_{00} is the average log-odds of violent behaviors across schools, and τ_{00} is the variance between schools in violent behaviors.

Full Model

$$\eta_{ij} = \beta_{0j} + \gamma_{10}\text{Age}_i + \gamma_{20}\text{Male}_i + \gamma_{30}\text{MomEd1}_i + \gamma_{40}\text{MomEd2}_i + \gamma_{50}\text{Dfam1}_i + \gamma_{60}\text{Dfam2}_i + \gamma_{70}\text{Dfam3}_i + \gamma_{80}\text{Dfam4}_i + \gamma_{90}\text{Cuban}_i + \gamma_{100}\text{Mexican}_i + \gamma_{110}\text{Puerto Rican}_i + \gamma_{120}\text{Blacks}_i + \gamma_{130}\text{Residential stability}_i + \gamma_{140}\text{Immigrants}_i + \gamma_{150}\text{SES}_i + \gamma_{160}>75\%\text{Black}_i + \gamma_{170}>75\%\text{Latino}_i + \gamma_{180}\text{Mixed}_i + \gamma_{190}\text{SES*}>75\%\text{Black}_i + \gamma_{200}\text{SES*}>75\%\text{Latino}_i + \gamma_{210}\text{SES*Mixed}_i$$

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

Where, η_{ij} is the log odds of violent behaviors for individual i in school j , β_{0j} is the school random intercept, and γ_p are coefficients for individual, family, and neighborhood predictors. All continuous variables are grand mean centered for ease of interpretation.

Deviance statistics (-2 log likelihood function value [-2LL]) are included across each step in order to compare the fit indices across models, which illustrate the variance explained by each. In order to also account for potential clustering across neighborhood, I also fit a cross-classified model for binary outcomes (with schools and neighborhoods as non-nested clusters). Analyses were also conducted accounting only for neighborhood clustering at level-2. Point estimates did not differ for most variables, and the majority of the main conclusions of the study were robust to different random effects specifications. I report final results for the 2-level models with nesting within schools, because schools are the most important source of clustering and because this formulation allowed incorporation of the weights.

Furthermore, in order to maximize the sample, missing data points across all independent variables were calculated using an Estimation-Maximization (EM)

algorithm. This procedure is used to calculate the maximum likelihood estimates for parameters in probabilistic models and is considered the gold standard in missing data analysis (Raghunathan, 2004). It calculates the missing observations by using the observed data to estimate the values based on the parameter, and re-estimates the distribution of the parameters with the expected estimates of the unknown data until its results converge.

Results

Descriptive statistics.

Results in Table 4.2 show that racial/ethnic minorities in the sample differed from Whites in their risk for engaging in violent behaviors. Thirty eight percent of Whites, 49% of Cubans, 50% of Mexicans, 58% of Puerto Ricans, and 54% of Blacks reported any violent behaviors. As seen in the Table 4.2, Mexicans, Puerto Ricans, and Blacks had significantly greater risk of engaging in violent behaviors than Whites. Cubans did not differ from any of the other racial/ethnic subgroups in their risk of violence.

Table 4.3 presents the neighborhood characteristics *by the race/ethnicity of study participants*. The average population size in the tracts where participants live was 5,615.67 (*M* range 4,895 to 7,753), with higher population density among Cubans, $F(4, 128) = 8.97, p < .001$. Overall, the neighborhood socioeconomic status factor (where higher values indicate increases in socioeconomic advantage) was highest among Whites and lowest for Blacks. Contrary to evidence from the U.S. Census, among Latinos in the Add Health sample, it was lowest among Cubans and highest among

Puerto Ricans, $F(4, 128) = 20.59, p < .001$. Cubans and Blacks were more likely to live in neighborhoods that had the lowest proportion of adults with a college degree, while Whites and Puerto Ricans had the highest, $F(4, 128) = 4.11, p < .001$. A similar pattern was found for the proportion of the population representing professional/managerial occupations within neighborhoods, although Puerto Ricans had the highest proportion, $F(4, 128) = 7.79, p < .001$. The proportion of persons who lived below the poverty line varied by racial/ethnic group, $F(4, 128) = 22.81, p < .001$. Among Latinos, Cubans had the highest poverty rates, followed by Puerto Ricans, and Mexicans. Unemployment rates, $F(4, 128) = 21.66, p < .001$, were highest rates among Blacks, followed by Puerto Ricans, Cubans, and Whites.

Table 4.2. Distribution and Risks for Violence Behaviors, Full Sample, by Racial/Ethnic Group^a

	Full Sample	Whites	Cubans	Mexicans	Puerto Ricans	Blacks
N, %	20,201,502	14,663,897	154,989	1,534,618	349,574	3,498,424
No Violence	58	62	51	50	42	46
Any Violence	42	38	49	50	58	54
OR (95% CI)^b						
Whites	--	--	.713 (.472 – 1.08)	.595*** (.483 - .732)	.561*** (.420 - .749)	.545*** (.475 - .625)
Cubans	--	1.40 (.929 – 2.12)	--	.809 (.515 – 1.27)	.788 (.498 – 1.24)	.765 (.505 – 1.16)
Mexicans	--	1.68*** (1.37 – 2.07)	1.20 (.767 – 1.87)	--	.943 (.657 – 1.35)	.916 (.734 – 1.14)
Puerto Ricans	--	1.78*** (1.33 – 2.38)	1.27 (.804 – 2.01)	1.06 (.738 – 1.52)	--	.971 (.725 – 1.30)
Blacks	--	1.84*** (1.60 – 2.11)	1.31 (.864 – 1.98)	1.09 (.875 – 1.36)	1.03 (.769 – 1.38)	--

^a All analysis are weighted to achieve nationally representative estimates

^b Odds ratios (OR) and confidence intervals (CI) were calculated within a multilevel model with a school random intercept. Columns are reference groups.

Table 4.3. Descriptive Statistics of Adolescent Respondents' Neighborhoods of Residence, Full Sample and by Racial/Ethnic Group

	Full Sample	Whites	Cubans	Mexicans	Puerto Ricans	Blacks
Mean (S.E.)						
Total Population (n)***	5,616.72 (344.13)	5,735.59 (408.06)	7,752.80 (479.11)	5,866.01 (426.60)	5,810.93 (999.50)	4,894.73 (169.62)
Socioeconomic status factor***	.001 (.078)	.197 (.087)	-.531 (.165)	-.286 (.132)	-.207 (.092)	-.645 (.087)
Population >25 years old with college degree**	.224 (.011)	.235 (.013)	.179 (.020)	.202 (.017)	.211 (.010)	.191 (.010)
Population in professional/managerial occupations***	.227 (.009)	.237 (.010)	.171 (.019)	.192 (.013)	.266 (.009)	.199 (.009)
Persons under the poverty line***	.121 (.008)	.114 (.007)	.228 (.018)	.184 (.016)	.180 (.021)	.257 (.016)
Unemployment Rate***	.076 (.004)	.065 (.004)	.088 (.004)	.084 (.005)	.093 (.005)	.115 (.004)
Primary racial group^a						
>75% White neighborhood***	.683 (.032)	.857 (.019)	.138 (.069)	.275 (.055)	.369 (.001)	.190 (.028)
>75% Black neighborhood***	.055 (.014)	.001 (.001)	.009 (.008)	.010 (.005)	.023 (.000)	.306 (.051)
>75% Latino neighborhood***	.014 (.007)	.001 (.000)	.731 (.104)	.090 (.052)	.076 (.000)	.001 (.001)
>20%/>20% Mixed neighborhood ***	.247 (.025)	.141 (.019)	.122 (.043)	.625 (.051)	.533 (.001)	.503 (.049)
Controls						
Residential stability factor***	.081 (.059)	.251 (.056)	-.953 (.043)	-.663 (.106)	-.524 (.131)	-.199 (.112)
Population living >5 years in households***	.356 (.556)	.563 (.008)	.485 (.016)	.473 (.011)	.562 (.015)	.563 (.014)
Owner occupied households***	.687 (.012)	.734 (.009)	.449 (.037)	.569 (.022)	.467 (.049)	.578 (.021)
Immigrant concentration***	.054 (.007)	.036 (.003)	.609 (.077)	.176 (.022)	.170 (.033)	.042 (.007)

*** p < .001, ** p < .01, * p < .05 differences by adolescents' race/ethnic subgroup. ANOVAs were conducted for continuous variables, while Pearson's Chi-square was conducted for categorical ones. ^a = The proportion of adolescents in the sample who live in neighborhoods characterized by specific racial compositions.

Sixty eight percent of participants lived in primarily White neighborhoods, while 6% lived in Black, 1% in Latino, and 25% in mixed neighborhoods. Results of the distribution by race/ethnicity indicate that among Latinos, Puerto Ricans were more likely to live in primarily White neighborhoods, compared to Mexicans or Cubans; although Blacks were also more likely to live in primarily White neighborhoods than Cubans, $\chi^2(4, 16,611) = 323.15, p < .001$. Compared to Blacks, none of the racial/ethnic subgroups was likely to live in primarily Black neighborhoods, $\chi^2(4, 16,611) = 275.81, p < .001$. Seventy three percent of Cubans lived in primarily Latino neighborhoods, in sharp contrast to 9% of Mexicans and 8% of Puerto Ricans, $\chi^2(4, 16,611) = 512.81, p < .001$. Most Mexicans (62%), Puerto Ricans (53%), and Blacks (50%) lived in mixed neighborhoods, $\chi^2(4, 16,611) = 163.81, p < .001$. In this sample, Cubans and Whites were most likely to live in segregated neighborhoods, as defined by the 75% cut-off points.

The residential stability factor differed by race/ethnicity, $F(4, 128) = 27.34, p < .001$, and was lowest for Cubans and highest for Whites. All groups, except Whites, had negative means, suggesting high mobility in the neighborhoods of minority adolescents. As expected, immigrant concentration differed by racial/ethnic group, $F(4, 128) = 24.14, p < .001$, and was highest among Latinos, particularly Cubans. The lowest levels were among Whites and Blacks. Mexicans and Puerto Ricans lived in neighborhoods where less than 20% of the population was first generation immigrants.

Table 4.4 shows the descriptive statistics for key neighborhood factors *by the primary racial/ethnic composition of the census tract*. Tukey-Kramer adjusted ANOVAs were used to test for significant neighborhood compositional differences.

Primarily Latino neighborhoods had significantly more people than White, Black, or mixed ones, $F(3, 2,172) = 18.95, p < .001$. Figure 4.1 presents boxplots that highlight the distribution of neighborhood socioeconomic status by racial/ethnic composition. As can be seen in the figure and Table 4.4, neighborhood socioeconomic status was highest in White neighborhoods, and lowest in Black ones, closely followed by Latino neighborhoods, $F(3, 2,160) = 305.76, p < .001$. When it comes to the adult population with a college degree, White neighborhoods had the highest rates, compared to Latino and Black neighborhoods. Mixed neighborhoods had higher rates, but did not reach that of White neighborhoods, $F(3, 2,170) = 112.00, p < .001$. A similar pattern was found for the proportion of the population in professional or managerial occupations within neighborhoods, $F(3, 2,165) = 124.54, p < .001$. The rates of family poverty varied dramatically by racial/ethnic composition of the neighborhoods, $F(3, 2,163) = 305.58, p < .001$. It is highest in Black neighborhoods, followed by Latino, mixed, and White ones. A similar pattern was found for the unemployment rate, $F(3, 2,160) = 453.11, p < .001$.

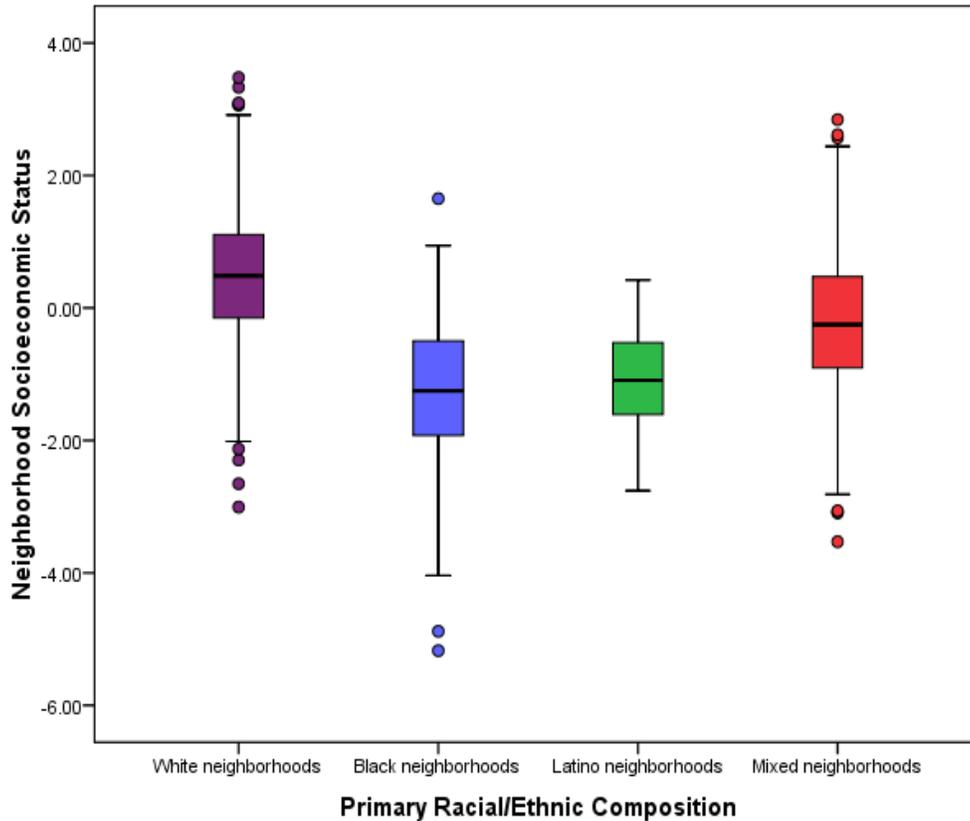
Table 4.4. Descriptive Statistics of Respondents' Neighborhoods, by Primary Racial/Ethnic Composition

Mean (S.D.)	All tracts	>75% White	>75% Black	>75% Latino	>20%/>20% Mixed
N	2,332	1,036	303	81	757
Total Population (N)***	4,863.78 (3,284)	4,862 (3,247)	4,161 (2,250)	7,194 (5,500)	4,921 (3,200)
Neighborhood racial/ethnic composition					
Non-Latino whites***	.596 (.351)	.913 (.070)	.041 (.049)	.100 (.050)	.453 (.207)
Non-Latino blacks***	.230 (.323)	.035 (.048)	.921 (.071)	.023 (.038)	.256 (.224)
Latino, all races***	.134 (.212)	.033 (.042)	.031 (.049)	.868 (.058)	.221 (.200)
Non-Latino others***	.040 (.078)	.019 (.023)	.007 (.015)	.011 (.016)	.070 (.100)
Neighborhood economic status					
Socioeconomic status factor***	-.054 (1.16)	.522 (.949)	-1.27 (.990)	-1.06 (.693)	-.235 (1.02)
Population aged 25+ with college degree***	.235 (.145)	.282 (.154)	.142 (.081)	.122 (.069)	.220 (.128)
Population in professional/managerial occupations***	.235 (.117)	.276 (.122)	.170 (.068)	.118 (.056)	.216 (.105)
Persons living under the poverty line***	.169 (.138)	.075 (.071)	.269 (.154)	.240 (.109)	.168 (.128)
Unemployment Rate***	.085 (.059)	.055 (.032)	.164 (.070)	.107 (.039)	.091 (.050)
Controls					
Residential stability factor***	-.308 (1.10)	.069 (1.01)	-.259 (1.04)	-1.03 (.896)	-.724 (1.06)
Population living >5 years in the same household***	.541 (.133)	.548 (.130)	.623 (.105)	.494 (.117)	.500 (.132)
Owner occupied households***	.578 (.238)	.696 (.186)	.458 (.243)	.409 (.195)	.502 (.224)
Immigrant concentration***	.117 (.157)	.046 (.060)	.051 (.112)	.562 (.223)	.168 (.139)

*** p <.001. Differences of neighborhood characteristics by primary racial composition were tested with Tukey-Kramer. Analyses are not weighted and should not be understood to be representative of neighborhoods in the country.

The neighborhood control variables also differed by neighborhood racial/ethnic composition. White and mixed neighborhoods had the highest level in the residential stability factor, $F(3, 2,165) = 100.61, p < .001$, with a higher proportion of the population having lived in their household for more than five years, $F(3, 2,170) = 73.24, p < .001$, and/or having lived in an owner-occupied home, $F(3, 2,165) = 193.08, p < .001$. As expected, the highest concentration of first generation immigrants was found in primarily Latino neighborhoods, $F(3, 2,170) = 676.40, p < .001$.

Figure 4.1. Distribution of Neighborhood Economic Status by Racial/Ethnic Composition



In order to achieve a better understanding of the neighborhood socioeconomic profile in which adolescents reside, the neighborhood socioeconomic variable was

divided into quartiles ($n = 582/583$), and additional descriptive analyses were conducted. Table 4.5 shows the mean and standard deviations for all key variables by neighborhood socioeconomic quartiles, where higher groups represent more advantage. Results indicate that as neighborhood advantage increases, there is a decrease in the proportion of the population that is Black or Latino. As is expected, more advantaged neighborhoods have higher proportions of people with college degrees and in professional/managerial occupations, and lower proportions of persons living in poverty and lower unemployment rates. Crosstabs were used in order to assess the extent to which different levels of neighborhood socioeconomic status overlap with neighborhood racial/ethnic composition and with adolescents' racial/ethnic backgrounds.

Table 4.6 highlights that White neighborhoods were significantly more likely to be in the higher socioeconomic status categories than Black, Latino, or mixed ones. In fact, the overwhelming majority of Black and Latino neighborhoods are in the lowest quartile of the neighborhood socioeconomic status distribution, $F(12, 16,630) = 16.20$, $p < .001$. Table 4.7 presents the distribution for the full sample, and vis-à-vis adolescents' racial/ethnic background. Results indicate that significant differences exist, $\chi^2(9, 2,330) = 686.43$, $p < .001$. Over half of White adolescents live in the neighborhoods above the median level of socioeconomic status, compared to 24% of Cubans, 40% of Mexicans, 46% of Puerto Ricans, and 28% of Blacks.

Table 4.5. Descriptive Statistics of Adolescent Respondents' Neighborhoods, by Neighborhood Socioeconomic Status Quartile

Mean (S.D.)	All tracts	SES 1	SES 2	SES 3	SES 4
N	2,332	583	583	583	583
Total Population (n)	4,864 (3,284)	4,066 (2,089)	4,919 (3,308)	5,364 (3,475)	5,185 (3,830)
Neighborhood racial/ethnic composition					
Non-Latino Whites	.596 (.351)	.271 (.313)	.574 (.348)	.728 (.268)	.813 (.185)
Non-Latino Blacks	.230 (.323)	.494 (.379)	.225 (.319)	.118 (.219)	.080 (.138)
Latino, all races	.134 (.212)	.213 (.294)	.164 (.229)	.103 (.142)	.056 (.076)
Non-Latino others	.040 (.078)	.022 (.057)	.037 (.073)	.051 (.093)	.051 (.080)
Neighborhood economic status					
Socioeconomic status factor	-.054 (1.16)	-1.55 (.629)	-.402 (.216)	.338 (.228)	1.40 (.550)
<i>Population aged 25+ with college degree</i>	.235 (.145)	.098 (.043)	.162 (.055)	.250 (.060)	.433 (.113)
<i>Population in professional/managerial occupations</i>	.235 (.117)	.129 (.051)	.174 (.044)	.243 (.049)	.393 (.089)
<i>Persons living under the poverty line</i>	.169 (.138)	.351 (.121)	.166 (.072)	.096 (.058)	.062 (.051)
<i>Unemployment rate</i>	.085 (.059)	.158 (.064)	.086 (.029)	.057 (.022)	.039 (.018)
Controls					
Residential stability factor	-.308 (1.10)	-.062 (1.05)	-.202 (1.06)	-.163 (1.05)	-.234 (1.15)
<i>Population living >5 years in the same household</i>	.541 (.133)	.548 (.130)	.559 (.125)	.532 (.134)	.510 (.143)
<i>Owner occupied households</i>	.578 (.238)	.696 (.186)	.584 (.221)	.641 (.205)	.655 (.221)
Immigrant concentration	.117 (.157)	.046 (.060)	.143 (.189)	.106 (.132)	.088 (.093)

Table 4.6. Percent Distribution of Neighborhood Socioeconomic Status Groups, by Racial/Ethnic Composition

Racial/Ethnic Composition	SES 1 (n = 582)	SES 2 (n = 583)	SES 3 (n = 582)	SES 4 (n = 583)
<i>White (n = 1,087)</i>	6.6	22.6	31.2	39.6
<i>Black (n = 318)</i>	66.0	24.2	8.2	1.6
<i>Latino (n = 88)</i>	62.5	28.4	9.1	0.0
<i>Mixed (n = 837)</i>	29.3	28.1	25.0	17.7

Table 4.7. Percent Distribution of Adolescents by Racial/Ethnic Group, by Neighborhood Socioeconomic Status Quartiles

Neighborhood SES Quartile	Full Sample	Whites	Cubans	Mexicans	Puerto Ricans	Blacks
<i>SES 1</i>	22.5	14.0	40.4	36.3	29.0	50.1
<i>SES 2</i>	24.3	24.8	36.7	23.8	25.2	21.6
<i>SES 3</i>	31.4	35.6	13.6	27.0	26.3	17.6
<i>SES 4</i>	21.8	25.6	10.3	12.9	19.5	10.7

Multivariate Analyses

This study had two primary questions: 1) *What influence do neighborhood socioeconomic status and neighborhood racial/ethnic composition have on the risk of youth violence among a racially/ethnically diverse sample?* 2) *Does primary racial/ethnic composition of the neighborhood moderate the influence of neighborhood socioeconomic status on violence among ethnically diverse youth?* Model 1 in Table 4.8 includes individual and family control variables, all of which are significant and in the expected direction. Increases in age were associated with a decrease in the odds of violent behaviors and males have more than twice the odds than females. Adolescents' with mothers who had completed a high school education were 23.1% less likely to

report violence than those with mothers with less than a high school degree; while those with some college education or beyond were 40% less likely to report violent behaviors. With regards to demographic *familism*, only adolescents who lived in households with two parents and an additional adult kin were similar in risk to two parent households. Adolescents who lived in single parent households were at 41% higher odds, and those living with a single parent and an additional adult kin were at 34% higher odds; those who lived without a parent were at 81% higher odds of engaging in violent behaviors than those in two parent households. Model 2 included respondents' race/ethnicity. Cubans did not differ from Whites in violent behaviors after adjusting for controls, but all other minority groups did. Compared to Whites, Blacks were at the highest odds, $OR = 1.77$ (95% $CI = 1.54, 2.04$), followed by Puerto Ricans, $OR = 1.66$ (95% $CI = 1.21, 2.26$), and Mexicans, $OR = 1.50$ (95% $CI = 1.21, 1.86$). Model 3 included neighborhood control variables. Residential stability significantly decreased the odds of violent behaviors. Although immigrant concentration was not significant, the odds ratio suggests a trend toward lower risk within neighborhoods with a higher presence of foreign-born persons.

Table 4.8. Population Average Odds Ratios for Risk for Violent Behaviors

	Model 1	Model 2	Model 3	Model 4	Model 5
OR (95% CI)					
Individual/Family					
Age	.918*** (.892 - .944)	.913*** (.886 - .939)	.913*** (.887 - .940)	.912*** (.886 - .938)	.912*** (.886 - .938)
Males^a	2.38*** (2.20 - 2.58)	2.40*** (2.22 - 2.61)	2.41*** (2.22 - 2.61)	2.42*** (2.23 - 2.62)	2.42*** (2.23 - 2.63)
Mother's level of education^b					
High School/GED	.769*** (.666 - .889)	.799** (.688 - .929)	.804** (.693 - .933)	.823** (.708 - .956)	.822** (.707 - .956)
Some college or beyond	.599*** (.519 - .690)	.630*** (.542 - .733)	.635*** (.547 - .737)	.664*** (.570 - .773)	.668*** (.574 - .778)
Demographic familism^c					
Two parents & adult	1.10 (.945 - 1.28)	1.07 (.913 - 1.25)	1.08 (.918 - 1.26)	1.08 (.918 - 1.26)	1.07 (.917 - 1.26)
Single parent	1.41*** (1.26 - 1.58)	1.31*** (1.17 - 1.47)	1.29*** (1.15 - 1.44)	1.28*** (1.14 - 1.43)	1.28*** (1.14 - 1.44)
Single parent & adult	1.34*** (1.14 - 1.57)	1.23* (1.04 - 1.45)	1.21* (1.03 - 1.43)	1.21* (1.03 - 1.43)	1.21* (1.03 - 1.42)
Adult, no parents	1.81*** (1.48 - 2.21)	1.64*** (1.33 - 2.03)	1.63*** (1.32 - 2.02)	1.62*** (1.31 - 2.00)	1.62*** (1.31 - 2.00)
Race/ethnicity^d					
Cuban		1.39 (.973 - 1.98)	1.59* (1.02 - 2.47)	1.53 (.994 - 2.36)	1.47 (.953 - 2.27)
Mexican		1.50*** (1.21 - 1.86)	1.48*** (1.18 - 1.85)	1.46*** (1.16 - 1.82)	1.47*** (1.17 - 1.84)
Puerto Rican		1.66** (1.22 - 2.26)	1.64** (1.20 - 2.25)	1.59** (1.16 - 2.18)	1.61** (1.17 - 2.21)
Black		1.77*** (1.53 - 2.04)	1.71*** (1.48 - 1.96)	1.67*** (1.41 - 1.97)	1.69*** (1.43 - 2.00)
Neighborhood					
Residential stability			.885*** (.833 - .941)	.895*** (.839 - .953)	.888*** (.834 - .946)
Immigrant concentration			.548 (.241 - 1.24)	.364 (.125 - 1.06)	.359 (.117 - 1.10)

Socioeconomic status	.879***	.815***			
	(.825 - .936)	(.754 - .881)			
Racial/ethnic composition^c					
<i>Black neighborhood</i>	.799	1.12			
	(.606 - 1.05)	(.691 - 1.81)			
<i>Latino neighborhood</i>	1.37	1.42			
	(.752 - 2.50)	(.468 - 4.29)			
<i>Mixed neighborhood</i>	.987	.993			
	(.822 - 1.18)	(.828 - 1.19)			
Interactions^f					
<i>Socioeconomic status*Black Neighborhood</i>		1.42**			
		(1.10 - 1.82)			
<i>Socioeconomic status*Latino neighborhood</i>		1.14			
		(.641 - 2.03)			
<i>Socioeconomic status*Mixed neighborhood</i>		1.16*			
		(1.01 - 1.34)			
Model Fit (-2LL)	-2.552044 E+004	-2.557534 E+004	-2.559223 E+004	-2.562705 E+004	-2.564271 E+004

*** p < .001, ** p < .01, * p < .05, OR = Odds ratios, CI = Confidence Intervals

^a Females are reference group; ^b Less than high school is reference group; ^c Two parent households are reference group

^d White adolescents are reference group; ^e White neighborhoods are reference group

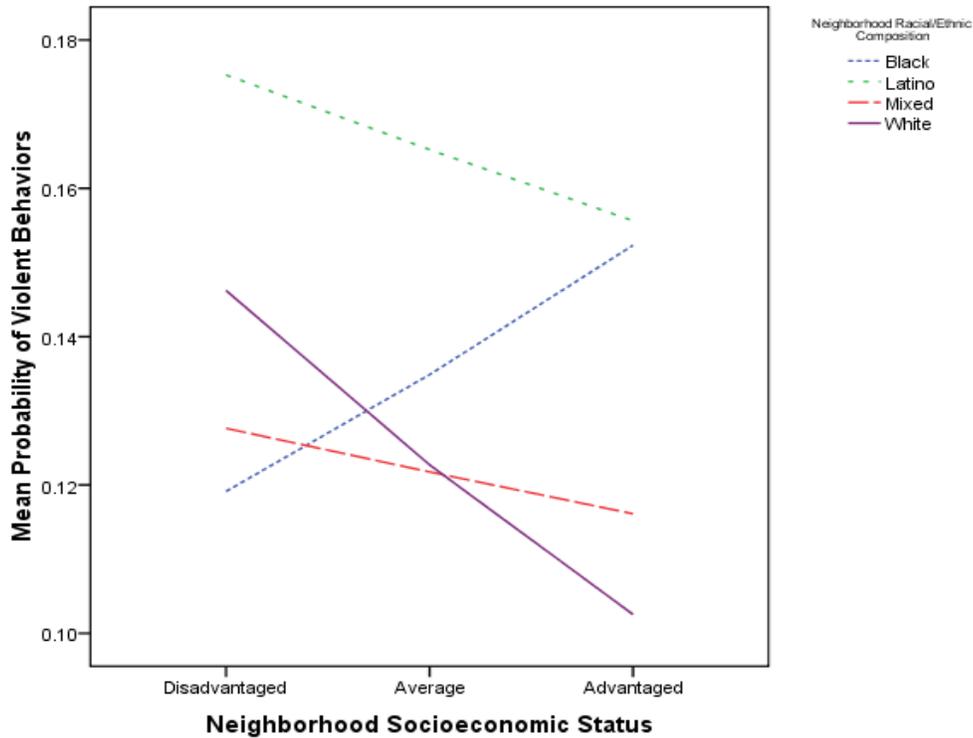
^f Interaction between neighborhood socioeconomic status and White neighborhoods is reference group.

Model 4 introduced neighborhood socioeconomic status and neighborhood racial/ethnic composition indicators. Socioeconomic status was a significant predictor, with each unit increase in advantage associated with a 12% decrease in the odds of violence. None of the minority or mixed neighborhoods differed from White neighborhoods in their risk of violence above and beyond the effects of neighborhood residential stability and socioeconomic status. This suggests that once the socioeconomic profile and stability of a neighborhood are accounted for, the racial/ethnic composition does not alter the odds of violence. However, the odds ratios suggest a trend where adolescents who lived in Black neighborhoods were at a lower

risk, while those in Latino neighborhoods were at an increased risk for violent behaviors after accounting for socioeconomic factors and stability.

Model 5 introduced the interactions between neighborhood economic status and each racial composition indicator (White neighborhoods were used as reference). The interactions with Black and mixed neighborhoods were significant. Figure 4.2 depicts the average probability of violent behaviors at the average level of neighborhood socioeconomic status, as well as one standard deviation below (disadvantaged), and one above (advantaged), by neighborhood racial/ethnic composition. Several findings are noteworthy. First, the association between violent behaviors and neighborhood socioeconomic advantage was negative in primarily White, Latino, and mixed neighborhoods. However, the association was positive in primarily Black neighborhoods. Under conditions of socioeconomic advantage, White neighborhoods had the lowest risk for violent behaviors, but under conditions of disadvantage, mixed and Black neighborhoods had the lowest risk. Those adolescents who lived in White neighborhoods had a sharp decrease in risk as affluence increased. The opposite seems to be true for those living in affluent, Black neighborhoods, where there were sharp increases in risk. Although they did not significantly differ from White neighborhoods, the trend showed the risk for violent behaviors was highest in Latino neighborhoods, regardless of the neighborhood socioeconomic status.

Figure 4.2. Mean Probability of Violent Behaviors by Neighborhood Socioeconomic Status and Racial/Ethnic Composition



Additional analyses were conducted to test for pair-wise differences in the probability of violent behaviors by racial composition of the neighborhoods. Models 4 and 5 were re-run with Black, Latino, and mixed neighborhoods as the reference category. Results indicate that compared to adolescents who live in primarily Black neighborhoods, those in mixed neighborhoods had a higher risk for violence, $OR = 1.24$ (95% $CI = 1.01, 1.52$). Further, analyses were consistent in their finding of the differences in risk across different levels of neighborhood socioeconomic status for mixed and Black neighborhoods compared to White ones, $OR = .706$ (95% $CI = .549, .908$).

In order to better understand the risk for violence among adolescents of different racial/ethnic backgrounds, I decomposed the findings in Figure 4.2 by

conducting additional analyses to assess the main effects of neighborhood socioeconomic status stratified by racial/ethnic composition of the neighborhood and by adolescents' racial/ethnic subgroup. As seen in Table 4.9, increases in age were protective for adolescents living in White, Black, and mixed neighborhoods but not in Latino neighborhoods. Males were at increased risk for violence compared to females in all types of neighborhoods. Increases in mother's education were protective in White and Latino neighborhoods, while demographic *familism* was significant in White and Latino neighborhoods and marginally significant in mixed ones. The pattern in primarily Latino neighborhoods was contrary to expectations, with those in single parent households having lower odds of violent behaviors than those in two parent households; while those in single parent households with an additional adult had higher odds.

The results for ethnic differences among youth within specific neighborhood types shows that in primarily White neighborhoods, Mexican and Black adolescents had higher odds of violence compared to White adolescents. This was not so for Cubans and Puerto Ricans, who did not differ in risk from White youth. Cuban, Mexican, and Black adolescents were also at increased risk for violent behaviors compared to White adolescents in Black neighborhoods. In Latino neighborhoods, Cuban and Puerto Rican adolescents were at higher risk than Whites, while Black adolescents were at significantly lower risk than Whites in Latino neighborhoods. In mixed neighborhoods, Mexican, Puerto Rican, and Black adolescents were at increased risk compared with Whites. At the neighborhood level, residential stability was protective in primarily White and Latino neighborhoods, while immigrant

concentration was protective in Black and Latino neighborhoods. Socioeconomic status was protective only in White neighborhoods, but was a risk factor in primarily Latino neighborhoods.

Analysis stratified by individual adolescents' race/ethnic background, as seen in Table 4.10, indicates that age was only significant among Whites and Blacks, both for which it decreased the risk for violent behaviors. Among Mexican, White, and Black adolescents, males had an increased risk compared to females. Interestingly, there were not significant differences between males and females in risk of violent behaviors for either Cuban or Puerto Rican adolescents. Increases in mother's education were associated with decreases in risk among Whites and Blacks only. Cuban adolescents whose mothers had completed a high school education were at an increased risk for violence compared to those whose mothers had not completed high school or an equivalent degree. Demographic *familism* was only significant among White and Cuban adolescents. Among Whites, those who lived with a single parent, with a single parent with an additional adult, or with an adult who is not their parent were at an increased risk compared to those who lived in two parent households. Among Cubans, only those who lived in households without a parent were at an increased risk compared to those in two parent households.

Table 4.9. Population Average Odds Ratios of the Risk for Violent Behaviors by Racial/Ethnic Composition of the Neighborhoods

OR (95% CI)	White neighborhoods	Black neighborhoods	Latino neighborhoods	Mixed neighborhoods
Individual				
Age	.919*** (.890 - .949)	.802*** (.728 - .885)	1.02 (.993 - 1.04)	.922*** (.881 - .964)
Males^a	2.69*** (2.46 - 2.95)	2.12** (1.34 - 3.36)	1.77*** (1.66 - 1.89)	1.96*** (1.66 - 2.32)
Mother's level of education				
High School/GED	.748** (.618 - .906)	.880 (.430 - 1.80)	.768*** (.704 - .838)	.903 (.699 - 1.17)
Some college or beyond	.592*** (.481 - .727)	.591 (.308 - 1.14)	.993 (.910 - 1.08)	.803 (.638 - 1.01)
Demographic familism^b				
Two parents & adult	1.12 (.905 - 1.39)	.631 (.283 - 1.41)	.786*** (.720 - .858)	.954 (.773 - 1.18)
Single parent	1.34*** (1.15 - 1.56)	.871 (.605 - 1.25)	.507*** (.460 - .559)	1.23* (1.05 - 1.44)
Single parent & adult	1.44** (1.13 - 1.86)	.808 (.575 - 1.13)	1.32*** (1.20 - 1.45)	.963 (.782 - 1.19)
Adults, no parents	2.09*** (1.54 - 2.85)	.633 (.388 - 1.03)	.822** (.694 - .973)	1.25 (.913 - 1.72)
Race/Ethnicity^c				
Cuban	.797 (.272 - 2.33)	37.10* (1.90 - 725.8)	1.13** (1.04 - 1.22)	1.90 (.691 - 5.22)
Mexican	1.38* (1.01 - 1.89)	11.22* (1.28 - 98.4)	.948 (.828 - 1.09)	1.46** (1.13 - 1.89)
Puerto Rican	1.42 (.818 - 2.45)	2.96 (.523 - 16.8)	2.06*** (1.75 - 2.42)	2.03*** (1.35 - 3.07)
Black	1.69*** (1.37 - 2.08)	3.63* (1.26 - 10.4)	.367*** (.243 - .556)	1.93*** (1.56 - 2.37)
Neighborhood				
Residential stability	.873*** (.812 - .940)	.857 (.657 - 1.12)	.843*** (.795 - .894)	1.00 (.900 - 1.12)
Immigrant concentration	.965 (.065 - 14.34)	.002* (.000 - .230)	.238*** (.138 - .412)	.747 (.229 - 2.43)
Socioeconomic status	.828*** (.757 - .905)	1.28 (.955 - 1.71)	1.14** (1.04 - 1.25)	.973 (.879 - 1.08)

OR = Odds Ratios, CI = Confidence Intervals; a = Less than high school education is reference group; b = two parent households are reference groups; c = White adolescents are reference group

Table 4.10. Population Average Odds Ratios for Risk for Violent Behaviors, By Racial/Ethnic Group

OR (95% CI)	Whites	Cubans	Mexicans	Puerto Ricans	Blacks
Individual/Family					
Age	.920*** (.889 - .952)	.959 (.830 - 1.11)	.931 (.842 - 1.03)	.957 (.804 - 1.14)	.891*** (.840 - .945)
Males^a	2.70*** (2.45 - 2.97)	1.48 (.652 - 3.36)	2.16*** (1.52 - 3.08)	1.23 (.827 - 1.83)	1.89*** (1.57 - 2.28)
Mother's level of education^b					
<i>High School/ GED</i>	.792** (.596 - .893)	1.52* (1.07 - 2.17)	1.41 (.811 - 2.44)	.865 (.591 - 1.27)	.703* (.516 - .958)
<i>Some college or beyond</i>	.606*** (.494 - .745)	1.67 (.800 - 3.47)	.954 (.656 - 1.39)	.849 (.464 - 1.55)	.560*** (.406 - .772)
Demographic familism^c					
<i>Two parents & adult</i>	1.17 (.955 - 1.43)	.812 (.460 - 1.43)	.747 (.482 - 1.16)	1.26 (.524 - 3.02)	.950 (.641 - 1.41)
<i>Single parent</i>	1.34*** (1.15 - 1.57)	1.61 (.927 - 2.80)	1.01 (.667 - 1.52)	1.56 (.945 - 2.57)	1.11 (.905 - 1.37)
<i>Single parent & adult</i>	1.36* (1.07 - 1.72)	2.43 (.317 - 18.7)	.846 (.511 - 1.40)	.983 (.424 - 2.28)	.995 (.754 - 1.31)
<i>Adult, no parents</i>	1.89*** (1.42 - 2.51)	4.89*** (3.53 - 6.77)	1.50 (.795 - 2.82)	.939 (.363 - 2.43)	1.14 (.900 - 1.43)
Neighborhood					
Residential stability	.899** (.836 - .966)	.846 (.305 - 2.35)	.819* (.680 - .987)	.862 (.681 - 1.09)	.911 (.808 - 1.03)
Immigrant concentration	.383 (.056 - 2.63)	1.66 (.040 - 68.0)	.447 (.023 - 8.86)	1.53 (.031 - 74.3)	.212 (.024 - 1.91)
Socioeconomic status	.838*** (.767 - .915)	1.39 (.526 - 3.67)	.827 (.584 - 1.17)	.994 (.773 - 1.28)	1.02 (.891 - 1.16)
Racial/ethnic composition^d					
<i>Black neighborhood</i>	.368 (.040 - 3.41)	1.14 (.171 - 7.56)	14.34 (.947 - 217.4)	.819 (.334 - 2.01)	1.24 (.790 - 1.95)
<i>Latino neighborhood</i>	7.00* (1.44 - 34.0)	.404 (.065 - 2.51)	1.38 (.442 - 4.29)	.850 (.278 - 2.60)	1.67 (.245 - 11.32)
<i>Mixed neighborhood</i>	.920 (.737 - 1.15)	.653 (.120 - 3.55)	1.56 (.848 - 2.87)	.562* (.319 - .988)	1.27 (.875 - 1.84)

*** p < .001, ** p < .01, * p < .05, OR = Odds ratios, CI = Confidence Intervals

^a Females are reference group; ^b Less than high school is reference group; ^c Two parent households are reference group

^d White neighborhoods are reference group

Neighborhood residential stability was associated with a decrease in risk for violence among Whites and Mexicans. Immigrant concentration was not significant for any of the groups. Contrary to expectations, neighborhood socioeconomic status was only significant among White adolescents, with increases in affluence associated with decreases in the risk for violence. White adolescents living in primarily Latino neighborhoods had a sevenfold increased risk for violence compared to those in primarily White neighborhoods. Puerto Rican adolescents in mixed neighborhoods were at a 43.8% decreased odds for violence compared to those living in White neighborhoods. Neighborhood racial/ethnic composition was not significant for any other racial/ethnic subgroup in the study.

Discussion

Neighborhood factors have long been identified to have important effects on rates of crime and delinquency (Sampson, Morenoff, & Gannon-Rowley, 2002), particularly when it comes to explaining racial/ethnic disparities (Morenoff, Sampson, & Raudenbush, 2001). Linking the neighborhood characteristics to individual rates of violent behaviors, this study explored how neighborhood socioeconomic status and neighborhood racial/ethnic composition affect the risk for violent behaviors among a racially/ethnically diverse sample. I was particularly interested in comparing adolescents of different Latino ethnic subgroups to their White peers. As an important reference point in the literature in racial disparities and segmented assimilation, Blacks are also included in the analysis.

Results show partial support for the hypothesized associations. Overall, racial/ethnic minority groups differed in their risk of violent behaviors from Whites. Consistent with previous literature, Blacks have higher rates of violence than Whites, and have the highest relative risk (although not the highest prevalence) of all the groups compared (Franke, 2000; Kaufman, 2005; Sampson, Morenoff, & Raudenbush, 2005; De Coster, Heimer, & Wittrock, 2006). In other words, although the burden of violent behaviors is greatest among Puerto Ricans; relative to White adolescents, Blacks have the highest risk of engaging in violence. However, the distribution is more complicated among the different Latinos. Puerto Ricans have the highest risk for violence, while Cubans do not significantly differ from Whites in three of the four models in Table 4.8. These findings are fairly consistent across models, despite Puerto Ricans living in more affluent neighborhoods than Cubans.

Although at face value these findings are consistent with segmented assimilation theories (which suggest an increased risk among Puerto Ricans, but similar risks between Cubans and Whites), it seems that neither groups' economic profile is in the direction that was originally hypothesized, nor was it a significant predictor among the different Latino subgroups. In fact, compared to the national averages reported in the 1990 Census, the mothers of Cuban respondents in this sample have lower levels of education than Cuban females over 25 years old (35.5% had some college or beyond). The mothers' of Puerto Rican adolescents have higher levels than Puerto Rican females over 25 years old (29% had some college or beyond), and are more likely to live in neighborhoods that are in the lowest quartile of the neighborhood socioeconomic status distribution (US Bureau of the Census, 1990). Even though the high presence of first

generation immigrants in neighborhoods where Cubans are more likely to live may explain the low socioeconomic profile of Latino neighborhoods and suggest the presence of an ethnic enclave (Logan, Zhang, & Alba, 2002), the concentration of first generation immigrants in a neighborhood is not a significant predictor for violent behaviors in the overall or the Cuban-only results in Table 4.10.

Consistent with the present findings, Davis (2004) found that Cubans in Miami had lower personal incomes than Cubans in other areas of the country with smaller Cuban populations. She further argues that, given the higher socioeconomic status of Cubans outside of the enclave should make us reconsider the class origins in the development of enclaves themselves and revisit the assumptions of higher social position among this population's relative to other Latino ethnic subgroups. It is important to consider that immigrant concentration has been found to have a protective effect on rates of homicides (Martínez, 2003; 2002) and youth violence (Sampson, Morenoff, & Raudenbush, 2005; Frank, Cerdá, & Rendón, 2007) in city-wide studies. An important question then is who is at highest risk within the context of Latino neighborhoods. Why do these neighborhoods exhibit a trend towards higher risk for youth violence? Results by racial/ethnic subgroup suggest that Whites and Blacks in Latino neighborhoods may be at increased risk, not Mexicans, Puerto Ricans, or Cubans.

I have argued that using a single measure that combines both socioeconomic and racial/ethnic indicators is a mistake because it obscures the unique paths for risk for violence across different minority groups. Results from this study indicate that, although most socioeconomically advantaged neighborhoods have a lower risk for

violence as was expected, none of the different neighborhood racial/ethnic composition indicators differed in their risk compared to White neighborhoods, suggesting that once the former are considered, the latter does not influence risk. The second important aim of this study was to examine whether primary racial/ethnic composition of a neighborhood moderates the association between neighborhood socioeconomic status and individuals' risk for violent behaviors. Results show partial support for hypothesized associations. Adolescents living in predominantly White, affluent neighborhoods are less likely to engage in violence than those living in other affluent neighborhoods; however, those living in disadvantaged, White neighborhoods are at increased risk compared to those living in disadvantaged, Black or mixed neighborhoods. Adolescents living in a primarily Latino neighborhoods did not significantly differ in their risk for violence from those living in a White neighborhood, regardless of socioeconomic status.

Several findings from the moderation analyses are noteworthy. First, although neighborhoods' increases in socioeconomic status are associated with decreases in the risk for all but Black neighborhoods, the slope is steepest in White neighborhoods and least in mixed ones. This suggests that the protective effect of socioeconomic advantage is greatest in White neighborhoods. This may be due to several factors. First, neighborhood socioeconomic advantage is not qualitatively equivalent across racial/ethnic groups. That is, in Black and Latino neighborhoods compared to White neighborhoods, as seen in the differential distribution in Figure 4.1, the average level of neighborhood socioeconomic status in Black and Latino neighborhoods are below the mean levels in White neighborhoods. Second, the smaller effects on risk with increases

of socioeconomic status in minority neighborhoods may be a containment effect that is partially due to lower levels of socioeconomic status in the first place among these. This finding is consistent with city-wide studies of neighborhood socioeconomic disadvantage and White-Black differences in homicides and violent crimes (Krivov & Peterson, 2000; McNulty, 2001; Kaufman, 2005), where at extreme levels of disadvantage there is a decrease in risk. McNulty argues that a restricted distribution of Whites vis-à-vis Blacks in highly disadvantaged areas creates a ceiling effect where unit changes in disadvantage in White neighborhoods would produce a larger impact on violence than the corresponding unit change in Black neighborhoods. To my knowledge, prior studies have not examined this type of interaction in Latino or mixed neighborhoods.

Second, several findings in the study are not consistent with the tenants of classic SDT. Racial/ethnic composition of neighborhood was not influential in the odds for violence after considering neighborhood socioeconomic status in the pooled analyses. Overall, adolescents living in mixed (i.e., heterogeneous) neighborhoods have the lowest average risk for violence compared to those living in primarily White neighborhoods. This does not support the components of classic SDT, which argues that racial/ethnic heterogeneity is more likely to increase risk because it undermines good relationships between neighbors (Elliot et al., 1996). A closer examination of different types of mixed neighborhoods (e.g., White/Black, White/Latino, and Black/Latino) may shed some insights into how ethnic heterogeneity in a neighborhood shapes risks for violent behaviors. While racial/ethnic composition of the neighborhoods does not seem to be significant for adolescents of different racial/ethnic

backgrounds in the sample, results in Table 4.9 suggests that there are substantial racial/ethnic differences in the odds of violent behaviors across neighborhoods of different racial/ethnic composition, with White youths at lower risk. Black adolescents living in predominantly Latino neighborhoods were at lower risk for violent behaviors than White adolescents, while Puerto Rican adolescents in Black neighborhoods do not differ in risk from White adolescents. Both Cuban and Puerto Rican adolescents in White neighborhoods have similar risks for violent behaviors than White adolescents. All other findings suggest that racial/ethnic minority youth are at higher risk for violence than White youth, regardless of neighborhood racial/ethnic composition, including those who live in mixed neighborhoods. Future studies should examine the social dynamics, availability and extent of neighborhood institutional resources, and interactions between neighbors in conjunction with these structural factors to determine their contributions to the risk for violence.

Furthermore, it is clear that although neighborhood socioeconomic status has an important influence on differential rates of violence, it does not fully explain the race/ethnicity-violence relationship. The stratified analysis showed that neighborhood socioeconomic status was only protective in White neighborhoods, particularly for White adolescents. It did not have a protective effect among racial/ethnic minority youths, and higher socioeconomic status was associated with increased odds of violence in Latino neighborhoods. Interestingly, the Latino subgroup with the lowest risk for violence (i.e., Cubans) is most likely to live in primarily Latino neighborhoods, which in turn have lower levels of socioeconomic status than White neighborhoods.

Results in Table 4.10 indicate that White adolescents in this sample who live in primarily Latino neighborhoods have the greatest risk for violent behaviors compared to other White adolescents in other types of neighborhoods. The experiences with violent behavior of youths of different Latino backgrounds does not vary based on living in Latino neighborhoods vis-à-vis those living in neighborhoods of other racial/ethnic composition. These findings are consistent with a study among adolescents in Los Angeles, for whom living in a neighborhood with above-county averages of Latino concentration increased the odds of violent behaviors for Whites (Frank, Cerdá, & Rendón, 2007).

Third, there was a positive association between the odds for violence and neighborhood socioeconomic status for adolescents living in Black neighborhoods – where those in Black, advantaged neighborhoods have significantly higher risk for violence than those in Black, disadvantaged ones. This finding is surprising and opposite of the general findings in the youth violence literature (Sampson, Morenoff, & Gannon-Rowley, 2002). Results suggest that most adolescents in Black neighborhoods are not engaging in violent behaviors, despite the fact that the majority of Black neighborhoods are at the lower end of the socioeconomic continuum. One potential explanation may be that *social interactions* (e.g., collective efficacy, networks of support) may play a strong protective role through institutions such as churches and civic organizations (e.g., Boys and Girls Club). Other studies on adolescent health behaviors have found a similar effect, where living in primarily Black neighborhoods reduced the risk of cigarette smoking for Black and White youths (Xue, Zimmerman, & Caldwell, 2007). It is important to note that the authors found this regardless of

neighborhood socioeconomic status, whereas in the present study low levels of neighborhood socioeconomic status are associated with decreased risk for those living in Black neighborhoods only. At low levels of neighborhood socioeconomic status, living in a primarily White neighborhood seems to pose a significant risk for violence among adolescents, which may indicate that the resilience mechanisms present in disadvantaged, Black neighborhoods may operate differently in disadvantaged, White neighborhoods, which are proportionately fewer.

Fourth, in support of classic SDT, residential stability reduced the odds of violence in the pooled analysis. However, once stratified it was only protective for White and Mexican adolescents in White and Latino neighborhoods. The proportion of first generation immigrants was protective in Black and Latino neighborhoods. Odds ratios in the stratified analyses suggest that this factor may be protective among Whites, Mexicans, and Blacks, but a risk factor among Cubans and Puerto Ricans.

Most of the literature in this area has focused on understanding the effects of concentrated neighborhood disadvantage on violence rates, and in many cases either it exclusively looks at disadvantaged neighborhoods, or fails to distinguish the racial/ethnic composition vis-à-vis the socioeconomic status. The present findings highlight the importance for additional studies to focus on the impact of affluence, in particular in middle-class to affluent Black neighborhoods. Future studies comparing advantaged and disadvantaged Black neighborhoods could shed some light into this surprising finding. It may be that most adolescents in poor, Black neighborhoods do not engage in violence, in part due to parenting practices that compensate for greater levels of neighborhood risks. This may also reflect that among adolescents in Black

neighborhoods, affluence does not really protect against the risk for violence. Without large enough samples to conduct three-way interactions between neighborhood racial/ethnic composition, neighborhood socioeconomic status, and adolescents' racial/ethnic background, it is difficult to assess who is at greater risk in primarily Black neighborhoods.

A number of study limitations merit mentioning. First, neighborhoods were defined as census tracts, and thus are limited in conceptual depth. Residents' views of the boundaries of their neighborhoods are likely to differ from administrative definitions. Unfortunately large, national data sets do not allow for a more nuanced exploration of locally defined neighborhoods. Although Add Health provides data at the level of the census block linked to individual respondents, use of such a small unit was not possible since most neighborhoods in the sample would have a single respondent. Census tracts provided enough of a distribution to conduct multilevel analysis (Hull, Kilbourne, Reece, & Husaini, 2008). Second, Add Health did not gather independent measures of the social dynamics within the neighborhoods of residence of the adolescents in the samples. Additional information about the types, frequency, and other characteristics of the interactions between neighbors would greatly expand our understanding on the role of neighborhoods in shaping risk for violent behaviors. Third, although the US Census does gather information about the national ethnic origin of residents in tracts, this information is not readily available in the 1990 US Census Summary Tape File 3A, and thus not linked to respondents in the Add Health data set. This information is available only through the confidential census files (CENSAS data set), which are only available under

secure conditions at the Census Bureau's Data Research Centers (Logan, Zhang, & Alba, 2002).

Fourth, as previously mentioned, Add Health is a school-based sample with linked information about respondents' neighborhoods. As such, neighborhoods are not meant to be representative of all neighborhoods in the country (only schools are) and appropriate weights have not been developed to account for this discrepancy. In order to account for school clustering and be able to use weights that make results at the representative to adolescents in the country, models with school random effects were used. Differences in results from additional analysis using cross-classified models, and models with neighborhood effects at level-2 are primarily attributed to the use of weights. Future research may consider using neighborhoods as level-2 in order to test cross-level interactions between individual and family characteristics with neighborhood factors.

Fifth, the violence measure used as outcome included indicators that differed in type and severity. These may vary in their frequency and various factors may affect them differently as well. However, this measure is similar to others used in the youth violence literature and allowed me to capture the majority of violent behaviors among this sample (McNulty & Bellair, 2003). Sixth, this study is cross-sectional, thus causal arguments about neighborhood characteristics and violent behaviors across subgroups cannot be made. Rather, this study looks to identify how neighborhood factors are associated with the risk of youth violence across racial/ethnic subgroups. Finally, findings are based on the use of self-reported data of violent behaviors and family environments, thus subject to errors. Although, as with other sensitive information, self-reported measures of violence yield a more accurate representation of the problem among America's youths

(Tourangeau & Smith, 1996), there is a potential for social desirability and inaccurate recalls that may lead to under or over reporting of behaviors. However, in this study the majority of interviews occurred in the home using computer assisted personal interviews (CAPI) and audio-computer assisted self-interviews (A-CASI) to protect answers to sensitive topics. The two methods of data recording have been shown to maximize resources and easing the process of creating comprehensive databases. More importantly (particularly with the use of A-CASI), they protect the confidentiality of answers and decrease the effect of social desirability bias.

Findings from this study suggest that within-Latino ethnic variations in violent behavior follow a pattern consistent with the description of segmented assimilation, where Cubans have similar outcomes to Whites and Puerto Ricans have similar outcomes to Blacks (Portes & Zhou, 1997). However, the reasons for this are unclear, since Cubans who have the lowest rates of violent behaviors among Latinos, live in economically disadvantaged neighborhoods with higher risks of violent behaviors. The opposite seems to be true for Puerto Ricans. Future work should explore the relative risk of violence for each Latino ethnic group within Latino neighborhoods. Although public health interventions that seek to ameliorate the effects of neighborhood economic disadvantage may be beneficial for the risk of violence overall, their effect on reducing the racial/ethnic inequalities in violence may be modest given the findings that it was not significantly associated with the risk for violence among any of the minority groups. Additional studies are needed that explore the interactive effect between factors at more proximate levels (i.e., family and peer environments) and the neighborhood context in order to develop appropriate interventions that will have a significant effect

in reducing violence inequalities. Previous qualitative, ethnographic studies have examined the role of parenting and extended kin in reducing risk among minority adolescents living in poor neighborhoods (Harrison et al., 1990; Jarrett, 1997a, 1997b). Additional studies are needed to explore how these may serve as protective factors in better off neighborhoods. Such research would lay down the groundwork to create valid measures for large-scale quantitative studies, as well as provide important information that contextualizes findings from national studies.

References:

- Alba, R.D., & Logan, J.R. (1993). Minority proximity to Whites in suburbs: An individual-level analysis of segregation. *American Journal of Sociology*, 98, 1388-1427.
- Alba, R.D., & Nee, V. (1997). Rethinking assimilation theory for a new era of immigration. *International Migration Review*, 31, 826-874.
- Allison, P.D. (1999). *Logistic regression using the SAS program: Theory and application*. Cary, N.C.; SAS Institute.
- Bellair, P.E., Roscigno, V.J., & McNulty, T.L. (2003). Linking local labor market opportunity to violent adolescent delinquency. *Journal of Research in Crime and Delinquency*, 40(1), 6-33.
- Beyers, J.M., Loeber, R., Wikström, P.H., Stouthamer-Loeber, M. (2001). What predicts adolescents' violence in better-off neighborhoods? *Journal of Abnormal Child Psychology*, 29(5), 369-381.
- Blum, R.W., Beuhring, T., Shew, M.L., Bearinger, L.H., et al. (2000). The effects of race/ethnicity, income, and family structure on adolescent risk behaviors. *American Journal of Public Health*, 90(12), 1879.
- Bronfenbrenner, U. (1988). Interacting systems in human development: Research paradigms, present and future. In N Bolger, A Caspi, & M Moorehouse, (Eds.). *Persons in context: Developmental processes*. New York, NY: Cambridge University Press.
- Bruce, M.A. (2003). *Contextual complexity and violent delinquency among Black and White males*. Discussion Paper no. 1273-03. Retrieved June 17, 2009, from University of Wisconsin-Madison, Institute for Research on Poverty. Web site: <http://www.irp.wisc.edu/publications/dps/dpabs2003.htm#DP1273-03>
- Bui, H.N., & Thongniramol, O. (2005). Immigration and self-reported delinquency: The interplay of immigration generations, gender, race, and ethnicity. *Journal of Crime and Justice*, 28(2), 71-99.

- De Coster, S., Heimer, K., & Wittrock, S.M. (2006). Neighborhood disadvantage, social capital, street context, and youth violence. *The Sociological Quarterly*, 47, 723-753.
- Denton, N.A., & Massey, D.S. (1988). Residential segregation of Black, Hispanics, and Asians by socioeconomic status and generation. *Social Science Quarterly*, 69, 797-817.
- Diez-Roux, A.V. (2000). Multilevel analysis in public health research. *Annual Review of Public Health*, 21, 171-192.
- Durand, J., Telles, E., & Flashman, J. (2006). The demographic foundations of the Latino population. National Research Council. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 66-99) Washington, DC: The National Academies Press.
- Earls, F., & Buka, S.L. (1997). *Project on Human Development in Chicago Neighborhoods: Technical report*. Rockville, MD: National Institute of Justice.
- Elliot, D.S., Wilson, W.J., Huizinga, D., Sampson, R.J., Elliot, A., & Rankin, B. (1996). The effects of neighborhood disadvantage on adolescent development. *Journal of Research in Crime and Delinquency*, 33(4), 389-426.
- Frey, W.H., & Farley, R. (1996). Latino, Asian, and Black segregation in U.S. metropolitan areas: Are multiethnic metros different? *Demography*, 33, 35-50.
- Fischer, M.J., & Tienda, M., (2006). Redrawing spatial color lines: Hispanic metropolitan dispersal, segregation, and economic opportunity. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 66-99) Washington, DC: The National Academies Press.
- Frank, R., Cerdá, M., & Rendón, M. (2007). Barrios and burbs: Residential context and health-risk behaviors among Angeleno adolescents. *Journal of Health and Social Behavior*, 48(September):283-300.

- González Wahl, A.M., Breckenridge, R.S., & Gunkel, S.E. (2007). Latinos, residential segregation and spatial assimilation in micropolitan areas: Exploring the American dilemma on a new frontier. *Social Science Research*, 36, 995-1020.
- Gordon, M.M. (1964). *Assimilation in American life: The role of race, religion, and national origins*. New York: Oxford University Press.
- Harris, K.M., Halpern, C.T., Entzel, P., Tabor, J., Bearman, P.S., & Udry, J.R. (2008). The National Longitudinal Study of Adolescent Health. Research Design. Web site: <http://www.cpn.unc.edu/projects/addhealth/design>.
- Harrison, A.O., Wilson, M.N., Pine, C.J., Chan, S.Q., & Buriel, R. (1990). Family ecologies of ethnic minority children. *Child Development*, 61(2), 347-362.
- Hull, P., Kilbourne, B., Reece, M., & Husaini, B. (2008). Community involvement and adolescent mental health: Moderating effects of race/ethnicity and neighborhood disadvantage. *Journal of Community Psychology*, 36(4), 534-551.
- Jarret, R.L. (1997a). Resilience of low-income African American youth: An ethnographic perspective. *Ethos*, 25(2), 218-229.
- Jarrett, R.L. (1997b). Successful parenting in high-risk neighborhoods. *The Future of Children*, 9(2), 45-50.
- Kaufman, J.M. (2005). Explaining the race/ethnicity-violence relationship: Neighborhood context and social psychological processes. *Justice Quarterly*, 22(2), 224-251.
- Krivo, L.J., & Peterson, R.D. (2000). The structural context of homicide: Accounting for racial differences in process. *American Sociological Review*, 65, 547-634.
- Landale, N.S., Oropesa R.S., & Bradatan, C. (2006). Hispanic Families in the United States: Family Structure and Process in an Era of Family Change. In M. Tienda and F. Mitchell (Eds.) *Hispanics and the Future of America*. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 138-178) Washington, DC: The National Academies Press.

- Leiber, M.J., Mack, K.Y., & Featherstone, R.A. (2009). Family structure, family processes, economic factors, and delinquency: Similarities and differences by race and ethnicity. *Youth Violence and Juvenile Justice*, 7(2), 79-99.
- Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, 126(2) 309-337.
- Link, B.G., & Phelan, J.C. (2000). Evaluating the fundamental cause explanation for social disparities in health. In C.D. Bird, P. Conrad, & A.M. Freemont (Eds.). *Handbook of Medical Sociology*. Upper Saddle River, NJ: Prentice-Hall.
- Logan, J.R., Stults, B.J., & Farley, R. (2004). Segregation of minorities in the metropolis: Two decades of change. *Demography*, 41(1), 1-22.
- Logan, J.R., Zhang, W., & Alba, R.D. (2002). Immigrant enclaves and ethnic communities in New York and Los Angeles. *American Sociological Review*, 67(2), 299-322.
- Logan, J.R., Alba, R.D., McNulty, T., & Fisher, B. (1996). Making a place in the metropolis: Locational attainment in cities and suburbs. *Demography*, 33, 443-452.
- Martínez R. (2003). Moving beyond Black and White violence: African Americans, Haitian, and Latino homicides in Miami. In D.F. Hawkins, (Ed.). *Violent Crime: Assessing Race and Ethnic Differences*. New York, NY: Cambridge University Press.
- Martínez, R. (2002). *Latino homicide: Immigration, violence, and community*. New York, NY: Routledge Press.
- Massey, D.S. (2001). The prodigal paradigm returns: Ecology comes back to sociology. In A. Booth & A.C. Crouter (Eds). *Does it take a village? Community effects on children, adolescents, and families*. New York: Lawrence Erlbaum Associates.
- Massey, D.S. (1983). Residential succession: The Hispanic case. *Social Forces*, 61, 825-833.

- Massey, D.S. (1981) Hispanic residential segregation: A comparison of Mexican, Cubans, and Puerto Ricans. *Sociology and Social Research*, 65, 311-322.
- Massey, D.S. & Bitterman, B. (1985). Explaining the paradox of Puerto Rican segregation. *Social Forces*, 64(2), 306-331.
- Massey, D.S., & Denton, N.A. (1985). Spatial assimilation as a socioeconomic outcome. *American Sociological Review*, 50(1), 94-106.
- Massey, D.S., & Mullan, B.P. (1984). Processes of Hispanic and Black spatial assimilation. *American Journal of Sociology*, 89, 836-874.
- McNulty, T.L. (2001). Assessing the race-violence relationship at the macro level: The assumption of racial invariance and the problem of restricted distributions. *Criminology*, 39(2), 467-489.
- McNulty, T.L., Bellair, P.E. (2003a). Explaining racial and ethnic differences in serious adolescent violent behavior. *Criminology*, 41(3), 709-747.
- Morenoff, J.D., Sampson, R.J., & Raudenbush, S.W. (2001). Neighborhood inequality, collective efficacy, and the spatial dynamics of urban violence. *Criminology*, 39(3), 517-559.
- Peterson R.D, & Krivo, L.J. (2005). Macrostructural analysis of race, ethnicity, and violent crime: Recent lessons and new directions for research. *Annual Review of Sociology*, 31, 331.
- Portes, A., Fernández-Kelly, P., & Haller, W. (2005). Segmented assimilation on the ground: The new second generation in early adulthood. *Ethnic and Racial Studies*, 28(6), 1000-1040.
- Portes, A., & Grosfoguel, R. (1994). Caribbean diasporas: Migration and ethnic communities. *Annals of the American Academy of Political and Social Sciences*, 533, 48-68.

- Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The Annals of the American Academy of Political and Social Science*, 530, 74-96.
- Raghunathan, T.E. (2004). What do we do with missing data? Some options for analysis of incomplete data. *Annual Review of Public Health*, 25, 99-117.
- Raudenbush, S.W., & Bryk, A.S. (2002). *Hierarchical linear models: Applications and data analysis methods*, (2nd ed). Thousand Oaks, CA: Sage Publications.
- Reimers, C. (2006) Economic well being. *Hispanics and the Future of America*. M. Tienda and F. Mitchell, eds. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 291-361) Washington, DC: The National Academies Press.
- Rumbaut, R.G. (2006). The making of a people. *Hispanics and the Future of America*. M. Tienda and F. Mitchell, eds. Committee on Population, Division of Behavioral and Social Sciences and Education. (pp. 16-65) Washington, DC: The National Academies Press.
- Sampson, R.J. (2003). The neighborhood context of well-being. *Perspectives in Biology and Medicine*, 43(3), S53-S64.
- Sampson, R.J. (2001). How do communities undergrid or undermine human development? Relevant contexts and social mechanism. In A. Booth & A.C. Crouter (Eds). *Does it take a village? Community effects on children, adolescents, and families*. New York: Lawrence Erlbaum Associates.
- Sampson, R.J., Morenoff, J.D., & Gannon-Rowley, T. (2002). Assessing “neighborhood effects”: Social processes and new directions in research. *Annual Review of Sociology*, 28, 443-478.
- Santiago, A.M., & Galster, G. (1995). Puerto Rican segregation in the United States: Cause or consequence of economic status? *Social Problems*, 42(3), 361-389.
- Santiago, A.M., & Wilder, M.G. (1991). Residential segregation and links to minority poverty: The case of Latinos in the United States. *Social Problems*, 38(4), 492-515.

- Schulz, A.J., & Northridge, M.E. (2004). Social determinants of health: implications for environmental health promotion. *Health Education and Behavior*, 31(4), 455-471.
- South, S.J., Crowder, K., & Chávez, E. (2005). Migration and spatial assimilation among U.S. Latinos: Classic versus segmented assimilation trajectories. *Demography*, 42(3), 497-521.
- Tourangeau, R. & Smith, T.W. (1996). Asking sensitive questions: The impact of data collection mode, question format, and question context. *Public Opinion Quarterly*, 60, 275-304.
- U.S. Bureau of the Census (1990). *Persons of Hispanic Origin in the United States*. U.S. Department of Commerce, Economics and Statistics Administration, Census 1990, 1990 CP-3-3.
- Williams, D. R. & Collins, C. (2001). Racial residential segregation: A fundamental cause of racial disparities in health. *Public Health Reports*, 116, 404-416.
- Wilson, W.J. (1987). *The truly disadvantaged: the inner city, the underclass, and public policy*. Chicago, Ill: The University of Chicago Press.
- Xue, Y., Zimmerman, M.A., & Caldwell, C.H., (2007). Neighborhood residence and cigarette smoking among urban youths: The protective role of prosocial activities. *American Journal of Public Health*, 97(10): 1865-1872.
- Zhou, M. (1997). Segmented assimilation: Issues, Controversies, and Recent Research on the New Second Generation. *The International Migration Review*, 31(4), 975-1008.

CHAPTER 5

CONCLUSION

Studies have consistently found racial/ethnic disparities in the risk of violent behaviors among youth in the United States. The extent of racial residential segregation of Black and Latino populations in the United States has led many to argue that differences in risk for violence stem from vastly unequal distributions of socioeconomic resources in neighborhoods, that ultimately affect how households are structured and family members interact to reduce or increase risk (Jarrett, 1997a, 1997b; Sampson, Morenoff, & Gannon-Rowley, 2002). During the Civil Rights Movement, the economic and spatial isolation of racial/ethnic minorities in the national landscape was labeled as colonial (Blauner, 1969). This underscored the historical dimension of the relationship between members of these groups and the White majority through centuries of slavery, colonization, and the economic neo-colonization of Latin American countries. The very existence of isolated and marginalized communities provided substantial economic and psychological benefits to the majority population. Within this context, I began to further explore racial and ethnic inequalities in youth violence in the United States in this dissertation.

The majority of research on youth violence has focused on understanding White-Black differences in rates and risk and protective factors (Bruce, 2000). More recently some studies have included Latinos as a pan-ethnic category in local and national studies, with results suggesting an increased risk compared to Whites (Smith & Krohn,

1995; Frank, Cerdá, & Rendón, 2007; Franke, 2000; Kaufman, 2005). Very little is known, however, about the risk for violent behaviors among specific Latino ethnic subgroups. The purpose of this dissertation was to examine the distribution of violent behaviors across adolescents from different Latino ethnic groups in the United States, in particular Mexicans, Puerto Ricans, and Cubans. Findings from the two empirical studies in this dissertation expands our current understanding of youth violence among Latinos by unpacking processes that have so far been largely overlooked in the literature.

Building on Social Disorganization Theory (SDT) and segmented assimilation theories, I offered a conceptual model that considered the protective effects of both neighborhood socioeconomic status and residential segregation against youth violence, while considering the powerful influences of individual factors in differences in youth violence across diverse Latino adolescents. Multiple dimensions of *familism* were also included as culture-based protective influences, while factors typically found to be associated with increased risk for youth violence were included as risk factors. This approach – the emphasis on structural determinants rather than a strictly individual focus – highlights how differences in patterns of assimilation across different Latino subgroups may be at odds with a strict interpretation of classic SDT and its positioning of neighborhood racial/ethnic heterogeneity as a risk factor for violent behaviors. The two empirical studies in this dissertation were designed to test specific aspects of the proposed conceptual model.

Both empirical studies presented in Chapter Three and Chapter Four found substantial differences in the risk of violent behaviors between Whites and other

racial/ethnic subgroups in the country. Using logistic regression models, in Chapter Three all racial/ethnic minority groups had higher risks for violence than their White peers, but did not differ significantly from each other. Puerto Ricans had the highest risk for violent behaviors in the sample followed by Blacks, Mexicans, and Cubans. This finding is fairly consistent with previous studies that have categorized all Latino groups under the pan-ethnic label, finding an increased risk among the overall population (Kaufman, 2005). Using multilevel models, in Chapter Four however, Cubans did not differ from Whites, or from any other racial/ethnic subgroup in their risk for violent behaviors. It is important to note that Cubans' significance levels in both studies are consistently borderline. Further, in Chapter Four Blacks had the highest risk for violence, followed by Puerto Ricans. Multilevel models are considered more accurate because they produce unbiased estimates of standard errors, which affect the p-values of covariates (Raudenbush & Byrk, 2002). Given both sets of results and the impact of the analytical technique, this suggests that Cubans hold an intermediate place in the risk of violent behaviors. This is consistent with segmented assimilation theory, which proposes that Cubans – who have gone through upward mobility despite of (or perhaps due to) high levels of segregation - have similar outcomes to Whites. Also consistent with this theory, at the other end the rates among Puerto Ricans closely resemble that of Blacks. This finding however is in light of a higher socioeconomic profile among Puerto Ricans in this sample compared to their counterparts nationally, and a lower one among Cubans compared to Cubans overall (US Bureau of the Census, 1990). This may suggest that other factors not captured in these measures may better explain the findings, such as more nuanced labor market indicators or the density of adolescents in a given

geographic area (Peterson & Krivo, 2005).

According to the 1990 US Census, Cubans have higher levels of socioeconomic status on most economic indicators compared to other Latino ethnic groups. For example, as a whole, they have higher median family income (\$32,417), are more likely to be employed in professional or managerial positions (23%), have lower unemployment rates (6.9%), have lower proportion of families (11.4%) and individuals (14.6%) living in poverty, and have higher educational attainment (16.5% of adults have completed college or beyond) than Puerto Ricans or Mexicans in the United States. On the other hand, the 1990 Census reported that Puerto Ricans have the lowest median family income (\$21,941), are less likely to be in professional or managerial professions (4.7%), have higher proportion of families (29.6%) and individuals (31.7%) living in poverty, and have lower educational attainment (9.5%) (US Bureau of the Census, 1990). However, the Add Health data set, which was collected during the 1994-1995 school year and was linked to the 1990 US Census, has quite a different socioeconomic profile for these two groups. In Add Health, Cubans were more likely to live in neighborhoods with a higher proportion of persons living in poverty (22.8%), and lower occupational (17%) and professional attainment (17.9%) than Puerto Ricans (18%, 26.6%, and 21%, respectively).

Despite the efforts of the Add Health research team to develop the appropriate weights that would account for the oversampling of Cuban and Puerto Rican adolescents in the studies, results for levels of mother's education and family and neighborhood socioeconomic profiles of these youths show that they are not representative of their respective ethnic groups' socioeconomic profiles at the national level. However, the

distribution of social characteristics for these groups in Add Health is similar to that found by other studies using the same data set, such as Sarmiento et al. (2004), and Guilamo-Ramos, Jaccard, Peña, and Goldberg (2005). These findings may indicate that the samples are locally representative of the Cuban population in Miami and Puerto Ricans in more affluent White/Latino mixed neighborhoods, but not nationally representative. During the last twenty years however, the socioeconomic profiles of both populations has changed dramatically. For example, since the 1990s, the new immigration of Cubans during what as labeled in the popular media as the “*balseo* crisis” (where thousands of Cubans crossed a dangerous stretch of the Atlantic ocean in small boats in order to land on American soil and be afforded political asylum), brought people with lower socioeconomic resources and levels of education that lowered the average profile among this group. This coincided with a large influx of highly educated Puerto Ricans from the island, who in light of the social and economic crisis in their homeland, have opted to move to the United States mainland in search of better economic opportunities, and who differ considerably from more established Puerto Rican populations in the northeastern states (Ramos-Zayas, 2003). New research among these populations should recruit participants from non-traditional ports-of-entry in order to better capture the changing socioeconomic dynamics among them.

Findings in Chapter Three suggest that although family environments are critical to understanding the rates of violence among adolescents overall, they are not uniformly relevant across racial/ethnic groups. Family cohesion was protective among Cubans, Mexicans, Whites, and Blacks; whereas demographic *familism* was only relevant among Cubans and Whites. Contrary to expectations parental engagement was not a protective

factor among any of the racial/ethnic groups. In fact, it was found to be associated with an increase risk among White and Black adolescents. Although this is contrary to the expected association, other studies have found similar results among African Americans. Walter, Maxon, and Newcomb (2007) found in a study of African American and Latino males in Los Angeles, that among the former, medium to high levels of parental attachment were associated with increased risk for violence, especially among youth who had been raised by both parents. These findings highlight that although findings reported here suggest the risk for violent behaviors does not differ across Latinos at the national level, the assumption that the risk is impacted by similar factors may be inaccurate, and thus the intervention programs and policies that are based on these assumptions may not yield the desired results across all groups.

Future data collection efforts are needed that have larger sample sizes of different Latino national groups and include more accurate measures of attitudinal, behavioral, and demographic *familism* to further our understanding of the role of culture, as reproduced in the family environment, across groups. Furthermore, future efforts should ensure the participation of adolescents from Latino groups not included in this dissertation (e.g., Dominicans, Salvadorans, Hondurans, Panamanians, etc.), whose populations have grown exponentially during the last 15 years (Rumbaut, 2006). Interestingly, results from both studies indicate that Cuban and Puerto Rican males were not at greater risk for violence than females in their respective groups. Future studies should consider the combined racial (i.e., skin color), ethnic, and gender distribution of violence as we move forward to theories of youth violence that consider the intersectionality of social groups in the distribution of risks.

In Chapter Four, I used multilevel models to examine the role of neighborhood socioeconomic status and racial/ethnic composition on the risk for violent behaviors, and how these interacted to increase or decrease the risk for violence among adolescents. Further, I assessed whether the impact of neighborhood factors on the risk for violence differs across neighborhoods of different racial/ethnic compositions. The first important finding is that, once neighborhood socioeconomic status is accounted for, the risk for violence among adolescents who live in Black, Latino, or mixed neighborhoods do not differ from those who live in a primarily White neighborhoods, according to the results in the pooled multivariate analyses. Second, although neighborhood socioeconomic status seems to be a strongly protective factor in White neighborhoods, the moderation analysis suggests it is a risk factor in primarily Black neighborhoods. Additional research that examines violent outcomes among youth who live in middle-class Black neighborhoods is needed to better understand the positive association found in this study. It is quite possible that among this group, the impact of socioeconomic inequality may be a stronger predictor than the role of affluence or poverty *per se*. The Index of Concentrated Extremes (ICE) suggested by Massey (2001) may be a useful tool in understanding how the socioeconomic contexts affect outcomes among those in more affluent Black neighborhoods.

There is a strong trend for adolescents in Latino neighborhoods to have the highest risk for violence, while those in mixed neighborhoods have the lowest. In a study of the risk for delinquency among adolescents in Los Angeles, Frank, Cerdá, and Rendón (2007) found that adolescents living in Latino neighborhoods (those whose population was above the county levels) were at significantly higher risk than those

living in White neighborhoods. More research examining the different types of Latino neighborhoods around the country may shed additional light onto the role that processes indicative of assimilation may play in the risk for youth violence.

Furthermore, the rates found among adolescents in mixed neighborhoods suggest that, contrary to classic SDT, racial/ethnic heterogeneity in a neighborhood may not be detrimental for the risk for violence. Analyses that stratified by the racial/ethnic background of respondents suggests that among Puerto Ricans, living in a mixed neighborhood greatly reduced the risk for violence compared to those living in White neighborhoods. Puerto Ricans living in Black neighborhoods did not differ in risk. However, this last finding may be due to a small number of Puerto Ricans in this sample living in primarily Black neighborhoods. Analyses stratified by the racial/ethnic composition of the neighborhood suggests that no racial/ethnic minority youth have higher odds of violent behaviors across all different types of neighborhoods when compared to White adolescents, including in mixed ones. Additional analyses looking at the different types of racial/ethnic mixed neighborhoods (e.g., White/Latino, White/Black, and Black/Latino) could shed some additional light onto these processes. Stratified results suggest that White adolescents in Latino neighborhoods are at higher risk than those in other types of neighborhoods, while Puerto Ricans' risk of violence is lowest in mixed neighborhoods compared to White neighborhoods. A strong trend suggests that Mexican adolescents in Black neighborhoods are at higher risk than those in White neighborhoods. Although the Add Health data set has been remarkably useful in allowing the stratified analyses presented in this chapter, future data collection efforts should include large enough samples of the different Latino ethnic groups at different

neighborhoods to conduct tests for 3-way interactions when theory and evidence suggest they may be at play. A neighborhood-based sample would allow an estimation of neighborhood-effects as a higher level of analysis in multilevel models, allowing the literature to better understand how these three Latino groups differ in their exposure to risk and protective factors in their neighborhoods.

Findings from the final empirical chapter suggest that the influences of neighborhood structural factors on the risk for violent behaviors are not as straightforward as SDT would argue. Previous national studies that report pooled analyses are primarily exploring the experiences of White adolescents. Socioeconomic status and residential stability are protective among this group, particularly in primarily White neighborhoods. However, socioeconomic status is neither protective among any of the racial/ethnic minority youths, nor protective in minority or mixed neighborhoods. In fact, in the pooled analysis it was not significant at all, while in the analysis stratified by racial/ethnic background of the adolescent, findings were contrary to SDT's premise on racial/ethnic heterogeneity. Furthermore, the inclusion of these variables in the analyses did not account for the racial/ethnic differences found in this study and other reports. Newer conceptualization of SDT that include the dynamic interactions between neighbors and social institutions, and among themselves, may be critical in understanding the level of risk of minority youths.

There are several limitations of the studies included in this dissertation that merit mentioning. First, both Chapters Three and Four use a binary violence measure that does not disentangle violent acts of differing severity or frequency. It is possible that a more nuanced analysis on this front would yield different results than those presented in this

dissertation. Second, both empirical studies are based on cross-sectional data, thus causal conclusions cannot be made at this time. Rather, the studies included in this dissertation focused on examining the roles of different family and neighborhood factors that are related to the risk for violent behaviors in a racially/ethnically diverse sample of adolescents in the United States. Third, findings are based on self-reported data of violent behaviors and family environments. Consistent with previous research on other sensitive information, studies of self-reported violence often show more accurate representation of the problem than other measures of violence (Tourangeau & Smith, 1996). However, there is a potential for social desirability and inaccurate recall that may lead to over- or under- reporting of some behaviors. To minimize this bias, the Add Health study used computer assisted personal interviews (CAPI) and audio-computer assisted self-interview (A-CASI) to protect answers to sensitive topics. These two methods of data collection have been shown to protect the confidentiality of participants' responses and decrease the effect of social desirability bias across numerous studies with ethnically diverse adolescents.

Fourth, several of the variables included in these studies are limited in their conceptual depth. The Add Health study did not include items that were specifically designed to measure *familism* and may not be good indicators of these dimensions. It is possible that measures that are culture-specific, and even ethnic-specific, should be used to better capture the effects of *familism*. Using a simple measure of each dimension may obscure the possibility that they may look differently across groups. This elusive concept requires more in-depth, qualitative assessments that examine how it compares across different Latino groups in the United States, as well as how these differ from

patterns found in their countries of origin. Future data collection efforts should include more nuanced measures of attitudinal, behavioral, and demographic *familism* to better assess the role of this important cultural value in shaping risk and protective factors across different Latino groups.

Fifth, neighborhoods were defined as census tracts, which may not be consistent with residents' views on their neighborhood geographic boundaries. Unfortunately, large, national data sets do not allow for a more nuanced exploration of how neighborhoods are defined locally. More recent, city-wide efforts have begun to explore the social dynamics of neighborhoods as defined by community residents (e.g., Project on Human Development in Chicago Neighborhoods, Boston Data Project), but cannot make inferences about Latino groups at the national level. Furthermore, Add Health is a school-based study where census information is then linked to respondents through use of their home street address. As such, neighborhoods are not meant to be representative of all neighborhoods in the country (only schools are) and appropriate weights have not been developed to account for this discrepancy. In order to account for the significant school clustering and to be able to use weights that make results representative of adolescents in school at the time of the study, models in Chapter Four included a school random effect.

Despite these limitations, results from this dissertation have important implications for public health policies and interventions. First, the prevalence and risk for violent behaviors among different Latino ethnic subgroups can be described, highlighting the fact that all Latinos do not conform to the same patterns of risk. Second, this dissertation examined the role of different elements of the family environment,

strongly suggesting that youth violence intervention programs aimed at addressing these environments must consider the specific national/ethnic background of youth since this may be relevant to which aspects of the family to target. Further, it examined the role of neighborhood factors in explaining risk and protective factors among youth. Results suggest that although policies aimed at addressing the structural, socioeconomic aspects of neighborhoods may yield significant results among primarily White and Latino neighborhoods, this may not be the case in Black or mixed neighborhoods. In fact, the positive association between neighborhood socioeconomic status and the risk for violence in Black neighborhoods merits additional inquiry. Specifically, whether the trends reported here are replicated in other data sets, and if so, the factors that protect against violence in less advantaged Black neighborhoods and the processes that contribute to increased risk as socioeconomic indicators improve, are critical questions that remain unanswered. The chapters included in this dissertation are a first step in the development of a conceptual model that explores within-Latino variations in youth violence. Future studies will examine the role of racial categorization within Latino ethnic groups, as well as the distribution of risk within ethnic/gender groups. Additionally, future studies will examine the interaction of family and neighborhood factors in simultaneously increase or decrease the risk of violent behaviors among Latinos across the country.

References:

- Bruce, M.A. (2000). *Inequality, interactional complexity, and violent delinquency: An exploration of structural, family, and individual considerations*. Discussion Paper no. 1216-00. Retrieved June 17, 2009, from University of Wisconsin-Madison, Institute for Research on Poverty. Web site: <http://www.irp.wisc.edu/publications/dps/dpabs2003.htm#DP1273-03>.
- Frank, R., Cerdá, M., & Rendón, M. (2007). Barrios and burbs: Residential context and health-risk behaviors among Angeleno adolescents. *Journal of Health and Social Behavior*, 48(September):283-300.
- Franke, T.M. (2000) Adolescent violent behavior: An analysis across and within racial/ethnic groups. *Journal of Multicultural Social Work*, 8(1/2), 47-70.
- Guilamo-Ramos, V., Jaccrad, J., Peña, J., & Goldberg, V. (2005). Acculturation-related variables, sexual initiation, and subsequent sexual behavior among Puerto Rican, Mexican, and Cuban youth. *Health Psychology*, 24(1), 88-95.
- Jarrett, R.L. (1997a). Resilience of low-income African American Youth: An ethnographic perspective. *Ethos*, 25(2), 218-229.
- Jarrett, R.L. (1997b). Successful parenting in high-risk neighborhoods. *The Future of Children*, 9(2), 45-50.
- Kaufman, J.M. (2005). Explaining the race/ethnicity-violence relationship: Neighborhood context and social psychological processes. *Justice Quarterly*, 22(2), 224-251.
- Massey, D.S. (2001). The prodigal paradigm returns: Ecology comes back to sociology. In A. Booth & A.C. Crouter (Eds). *Does it take a village? Community effects on children, adolescents, and families*. New York: Lawrence Erlbaum Associates.
- Peterson, R.D., & Krivo, L.J. (2005). Macrostructural analysis of race, ethnicity, and violent crime: Recent lessons and new directions for research. *Annual Review of Sociology*, 31, 331.

- Ramos-Zayas, A.Y. (2003). *National Performances: The politics of class, race, and space in Puerto Rican Chicago*. Chicago, IL: University of Chicago Press.
- Raudenbush, S.W., & Bryk, A.S. (2002). *Hierarchical linear models: Applications and data analysis methods*, (2nd ed). Thousand Oaks, CA: Sage Publications.
- Sampson, R.J., Morenoff, J.D., & Gannon-Rowley, T. (2002). Assessing “neighborhood effects”: Social processes and new directions in research. *Annual Review of Sociology*, 28, 443-478.
- Sarmiento, O.L., Miller, W.C., Ford, C.A., Schoenbach, V.J., Viadro, C.I., Adimora, A.A., & Suchindran, C.M. (2004). Disparities in routine physical examination among in-school adolescents of differing Latino origins. *Journal of Adolescent Health*, 34, 310-320.
- Smith C., & Krohn, M.D. (1995). Delinquency and family life among male adolescents: the role of ethnicity. *Journal of Youth and Adolescence*, 24(1), 69-93.
- Tourangeau, R. & Smith, T.W. (1996). Asking sensitive questions: The impact of data collection mode, question format, and question context. *Public Opinion Quarterly*, 60, 275-304.
- U.S. Bureau of the Census (1990). *Persons of Hispanic Origin in the United States*. U.S. Department of Commerce, Economics and Statistics Administration, Census 1990, 1990 CP-3-3.
- Walker, S.C., Maxson, C., & Newcomb, M.N. (2007). Parenting as a moderator of minority, adolescent victimization and violent behavior in high-risk neighborhoods. *Violence and Victims*, 22(3), 304-317.