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### CRIME AND VICTIMIZATION AMONG HISPANIC ADOLESCENTS: A MULTILEVEL LONGITUDINAL STUDY OF ACCULTURATION AND SEGMENTED ASSIMILATION

### A Final Report for the W.E.B. Du Bois Fellowship Submitted to the National Institute of Justice

Award No: 2008-IJ-CX-0003

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#### **EXECUTIVE SUMMARY**

The Hispanic population in the United States has increased considerably over the past two decades, accounting for 40% of the nation's population growth in the 1990s and 49% of the growth between 2000 and 2004 (U.S. Census, 2005). Unlike previous demographic shifts, this increase has been largely fueled by birthrate which has significant impact on the social context in which new generations of Hispanic Americans are socialized. One area in particular is that of crime and victimization among these "new" Hispanic populations and key to understanding these experiences may be rooted in the acculturation process.

This study represents a comprehensive effort to illustrate the divergent experiences of first-, second-, and third-generation Hispanic child and adolescent immigrants with respect to their self-reported violent victimization and involvement in criminal offending. This project is unique in that it synthesizes a vast amount of research toward the goal of understanding the complex linkages between immigration, culture, social structure, and criminological outcomes. Utilizing segmented assimilation to inform our study, we explore how neighborhood context, individual propensities, and situational factors impact crime and victimization among Latino youth. From a neighborhood perspective, segmented assimilation theory suggests that immigrant youth acculturate differentially depending on community context. Those who acculturate within disadvantaged, inner-city contexts, without strong family ties and support from other co-ethnics are likely to experience downward assimilation, resulting in more involvement in crime and other forms of deviance. We also examine how individual and situational factors impact the relationships between acculturation and crime and violent victimization. Using three well researched predictors of crime and victimization (i.e., delinquent peers, self-control, and parenting) we investigate how these influence the associations among assimilation status, acculturation context, and crime and victimization.

Using data from the Project on Human Development in Chicago Neighborhoods (PHDCN), we assessed the impact of a number of neighborhood and individual-level, theoretically informed variables on involvement in crime and victimization. As described below, the majority of our analysis used single-level logistic and negative binomial regression models because most of our outcome measures did not significantly vary by neighborhoods. Analyses indicate that net of linguistic assimilation and both child and primary caregiver demographics, second- generation Hispanic children were significantly more likely to report being violently victimized in the past 12 months when compared to their first-generation counterparts. Only delinquent peers were found to mediate the effect of generational status on violent victimization However, both self-control and parenting variables exerted insignificant effects. Unexpectedly, analyses also showed that self-reported past year violent victimization of Hispanic adolescents did not vary significantly across neighborhood clusters.

Analyses of self-reported criminal offending indicated that both second-and thirdgeneration Hispanics have a significantly higher likelihood of overall offending net of demographic and primary caregiver characteristics. Consistent with previous research, males, older children, and those with non-married primary caregivers were significantly more likely to report offending. However, linguistic assimilation was not significantly associated with an increased likelihood of offending. Also consistent with a long line of research, both exposure to delinquent peers and low self-control exerted a significant influence on the likelihood of offending. Nonetheless, second and third-generation Hispanics remained more likely to offend than their first-generation counterparts. Similar to findings from the victimization analysis, self-reported offending did not vary significantly across neighborhoods.

Offending was also examined by crime type, i.e., property and violent offending. Results indicate that neither generational status nor linguistic assimilation was able to predict property offending. Delinquent peers significantly increased the likelihood of property offending while low self-control did not reach a level of statistical significance. Additionally, property offending did not vary significantly across neighborhoods for Hispanic children and adolescents.

Examination of violent offending indicates that both second and third-generation Hispanics were more likely to report engaging in violent offending than their first generation counterparts, but linguistic assimilation exerted no impact on the likelihood of violent offending. Consistent with the analyses of overall offending behavior, males, older children, and those with non-married parents were more likely to report violent behavior. Also consistent with previous analyses, delinquent peers and low self-control significantly increased the chances of violent offending but were unable to mediate the strong association between generational status and violent offending. The prevalence of violent offending did not vary significantly across neighborhoods but the frequency of violent offending did. Contrary to expectations, additional analyses indicate that neighborhood variables did not exert a significant influence on selfreported frequency of violent offending. The totality of these findings offer negative evidence for neighborhood influences on offending and victimization but buttress the considerable literature linking individual outcomes to individual characteristics.

Examination of offending frequency indicates that second-generation Hispanics report offending more frequently than their first-generation counterparts. Linguistic acculturation predicted offending frequency as well as frequency of property offending. However, the association between linguistic assimilation and offending frequency dissipated when peers delinquency was taken into account. Primary caregiver warmth also had a statistically significant influence on offending frequency, indicating that children of primary caregiver who showed more warmth offended less frequently than those who were shown more warmth.

The findings produced from this study indicate that attention to the acculturative stressors experienced by immigrant children and their families should remain at the forefront of policy development. Acculturation, measured here by generational status, appears to serve as a risk factor for problem behavior among Hispanic adolescents and may be used to identify those children most at-risk for adolescent behavioral problems. Those who work with immigrant or ethnic minority populations should be cognizant of this relationship during the development, implementation, or operation of any programming designed to prevent or interrupt problem behavior among these groups.

#### ABSTRACT

### Crime and Victimization Among Hispanic Adolescents: A Multilevel Longitudinal Study of Acculturation and Segmented Assimilation

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This study is designed to examine how acculturation among Hispanic youth relates to involvement in crime and victimization experiences. While research shows that Hispanics who are more acculturated are more likely to engage in crime (e.g., Morenoff & Astor, 2006), virtually no studies have investigated why this is and in which contexts it is more likely to occur. We draw from segmented assimilation theory (Portes & Zhou, 1993) which combines elements of neighborhood structure and social processes with individual-level assimilation indicators to explore variation in delinquency and victimization. Segmented assimilation suggests that immigrant youth acculturate differentially depending on where they reside. Those who acculturate within disadvantaged, inner-city contexts are more likely to experience downward assimilation, resulting in more involvement in crime and other negative consequences. In turn, those acculturating in neighborhoods with high immigrant concentration are less likely to experience downward assimilation because of the protective factors associated with ethnic enclaves.

Unfortunately, much of the research investigating the link between acculturation and individual-level outcomes has lacked theoretical guidance and failed to account for the context in which crime and victimization occur. In an effort to address these shortcomings, this study has three objectives. First, we explore the dimensions of neighborhood structural and social characteristics that are related to Hispanic adolescents' involvement in crime and victimization experiences. Second, we are interested in whether a relationship exists between individual-level assimilation status and crime and victimization outcomes,. Third, we examine whether empirically-supported criminological constructs known to predict delinquency and victimization (e.g., delinquent peers, self-control) are associated with these outcomes for Hispanic adolescents and how they guide us in understanding the relationships among assimilation status and crime and victimization.

We use longitudinal data collected on three adolescent cohorts residing in various neighborhoods from the Project on Human Development in Chicago Neighborhoods (PHDCN). Data are derived from self-reports and primary caregivers as well as neighborhood structural and social characteristics taken from the U.S. Census and a community survey of neighborhoods. Due to the fact that most of our outcome measures did not significantly vary across neighborhoods, single-level logistic and negative binomial regression models that appropriately take into account the nesting of individuals within neighborhoods are used. Overall, our analytic framework allowed us to assess the influences of neighborhood conditions, assimilation status, and individual-level measures of criminological constructs on criminal involvement and victimization outcomes. Findings indicate that generational status exerts a significant effect on all modeled outcomes such that second and sometimes third-generation Hispanics are more likely to report both offending (overall, property, and violent) and victimization compared to first-generation Hispanics. While few neighborhood differences were found, several theoretically driven individual-level characteristics were associated with involvement in crime and victimization. Exposure to delinquent peers and low self-control were predictive across most outcomes but were often unable to mediate the influence of generational status. Unexpectedly, linguistic assimilation was unable to predict outcomes other than the frequency of offending, while victimization and offending did not vary significantly across neighborhoods. Findings are discussed with specific attention to theoretical development and policy implications.

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#### I. INTRODUCTION

The Hispanic population in the United States has increased considerably over the past two decades, accounting for 40% of the nation's population growth in the 1990s and 49% of the growth between 2000 and 2004 (U.S. Census, 2005). This increase has been fueled by both immigration and a high birthrate which has likely had significant impacts on the social context in which new generations of Hispanic Americans are socialized. One area in particular is that of crime and victimization among these "new" Hispanic populations and key to understanding these experiences may be rooted in the acculturation process.

Acculturation has long been a central focus for those who conduct research with ethnic minority populations (Negy & Woods, 1992; Zane & Mak, 2003) though criminologists have largely ignored the process when studying ethnicity and crime. Defined as the process wherein two distinct cultures come into contact resulting in significant change in one or both, acculturation more commonly results in the adoption of majority group values and behaviors by the minority. While acculturation is considered the over-arching process of contact with and exposure to multiple cultures simultaneously, several modes of acculturation exist that are largely dependent upon the context within which individuals reside and are socialized. We focus here on one particular mode of acculturation, assimilation, in which the acculturating individual acquires a new identity in a second culture (LaFromboise, et al., 1993; Portes & Zhou, 1993), often times in conflict with that of the "home" culture.

While the traditional view of the assimilation process is that it is generally linear, recent scholars have suggested that the experiences of post-1965 immigrants may not mirror those of previous cohorts (Gans, 1992; Portes & Zhou, 1993; Zhou, 1997). Instead, today's immigrants are predominantly non-white, they disproportionately reside in disadvantaged city centers in

close proximity to native-born minorities, and they face an economy that is much different from a century ago. These challenges lead immigrants to one of three modes of adaptation; assimilation into the middle class, assimilation into the underclass, or assimilation into an ethnic economy (i.e., the ethnic enclave). The mode of adaptation adopted is dependent upon both the skills and education of the individual and the environment into which one immigrates.

More generally, assimilation has been linked to several outcomes, including rates of school dropout, perceived discrimination, and intergenerational mobility (see, for example, Hayes-Bautista, et al., 1992; Hirschman, 2001; Oropesa & Landale, 1997). Review of the extant research reveals considerable evidence for a link between assimilation and many types of problem behaviors and outcomes, including drug and alcohol use (Amaro et al., 1990; Caetano, 1987; Chappin & Brook, 2001; de la Rosa, 2002), poor health habits (Love et al., 2006; Zambrana et al., 1997), and psychological distress (Cortes, 2003; Gong et al., 2003; Kaplan & Marks, 1990).

What has yet to be examined, however, are the contextual factors that may work to influence the relationship between assimilation and crime and victimization among Hispanics. In fact, very little research has focused exclusively on Hispanic crime and victimization (see, for example, Martinez, 2002; Miller et al., 2009) and few studies have considered the role of acculturation relative to other possible confounding factors that may impact these behaviors and experiences (J. Miller et al., 2008; Miller et al., in press). Within the segmented assimilation framework, Morenoff and Astor (2006) recently examined immigrant assimilation and violence; findings generally supported propositions of segmented assimilation in which violence was linked to neighborhood context, generational status, and other acculturation variables. A major shortcoming of this study was its failure to account for factors at both neighborhood and

individual levels that may confound the link between assimilation and violence. This study addresses this gap in the extant literature by examining how acculturation among Hispanic youth relates to their involvement in a wide variety of crime and victimization experiences while simultaneously considering the possible effects of contextual, individual, and situational factors. To that end, a multi-level, longitudinal study was conducted using individual and neighborhoodlevel data collected from 9, 12, and 15 year-old cohorts from the Project on Human Development in Chicago Neighborhoods (PHDCN).

A major limitation of the acculturation literature has been studies' inability to adequately synthesize research from a diverse range of disciplines toward an explanatory model of behavior for Hispanic crime and victimization. While several criminological theories may provide a plausible framework for better understanding Hispanic crime and victimization, many of these "general" theories of crime and criminality refrain from emphasizing the cultural context in which crime and victimization occurs. Criminal involvement and victimization, however, may be best explained within a context of cultural relativity that emphasizes differential social experiences. The current research is designed to examine the contextual nature of Hispanic crime and victimization within an empirically-based framework. Specifically, this project explores the link between acculturation, crime, and victimization among Hispanic youth while controlling for empirically supported situational and individual predictors of crime and victimization such as social learning variables (Akers, 1977; 1985; 1998) and self-control (Gottfredson & Hirschi, 1990), as well as neighborhood variables from social disorganization theory (Shaw & McKay, 1942; Sampson, Raudenbush, & Earls, 1997).

While many variables may theoretically affect the relationship between acculturation and crime, we focus on exposure to delinquent peers, low self-control, parenting, and neighborhood

characteristics for several reasons. First, neighborhoods are central to the immigrant experience in that they provide the primary context of socialization for immigrant youth beyond the family unit. Neighborhoods also dictate the daily reality for their residents in terms of quality of life. Neighborhoods also play an important role within the segmented assimilation perspective which contends that the spatial location in which immigrants reside contribute to the outcomes experienced by immigrants and their descendents. Empirical research has largely confirmed this claim, showing that certain features of neighborhoods, such as concentrated disadvantage, can impact both individual behavior (Morenoff & Astor, 2006) and crime rates (Martinez, 2000; Martinez & Lee, 2000) of Hispanic immigrants. Furthermore, inner city locations in close proximity to native-born minorities and criminogenic subcultures expose the second and thirdgeneration to higher concentrations of delinquent peer groups (Akers, 1998).

We take into account the influence of these delinquent peer groups by controlling for them. It is reasonable to expect that exposure to and influence by delinquent peers can assist in explaining the link between generational status and crime among Latino adolescents. As each successive generation becomes less attached to the traditional aspects of Hispanic culture, particularly the strong sense of familialism common within these communities, informal social control becomes more difficult to exert. Once diminished in importance, the family is unable to provide the level of supervision and involvement enjoyed by earlier generations. Decreased informal control mechanisms make both exposure to and influence by delinquent peers more likely. As a consequence, higher levels of crime and victimization may be observed.

The decline of Hispanic familialism brought about by generational progression may also theoretically impact parenting and the development of self-control. Changes in either have significant implications for crime and victimization. If intergenerational distance or discord

exists within families or neighborhoods, parenting practices, parent-child relationships, and the development of self-control may prove challenging. Problems with any of these may increase the likelihood of crime and victimization and thus may assist in disentangling the complex relationship between acculturation and crime.

#### **II. THEORETICAL ORIENTATION AND BACKGROUND**

This study was designed to bridge the gap between the two bodies of knowledge produced by sociology of immigration researchers and those who study ethnicity, immigration, and crime. Drawing from the theoretical framework of segmented assimilation (Gans, 1992; Portes & Zhou, 1993; Zhou, 1997), this analysis sheds light on the divergent realities of America's first, second, and third-generation Latino immigrants with respect to crime and victimization. The following sections provide an overview of the segmented assimilation perspective, a review of the extant assimilation literature, and the theoretical reasoning behind the current study which attempts to frame the discussion of Hispanic crime and victimization within a context of individual, situational, and neighborhood characteristics.

#### **Segmented Assimilation**

The traditional view of immigration sociologists has been that the assimilation process is a gradually linear one resulting in eventual acculturation to the host nation. Indeed, for the waves of immigrants who arrived in the United States between 1890 and 1920, their socioeconomic and cultural trajectories were consistent with this hypothesis (Perlmann & Waldinger, 1997). For the post-1965 immigrant cohort, however, there is doubt that their experiences will necessarily mirror those of their late 19<sup>th</sup> and early 20<sup>th</sup> century counterparts. There are several reasons for these divergent experiences including race/ethnicity, location, and economy.

Unlike the immigrants who arrived prior to WWII, the majority of today's immigrants are non-white. Thus, despite the variations in ethnicities of early twentieth century immigrants, most shared a common European ancestry both with each other and the host nation. And while at the time there were certainly attempts made by the native born, and particularly with regard to

immigration legislation in the early part of the twentieth century, to make distinctions between "Nordic", "Alpine", and "Mediterranean" races, intermarriage between groups over the second and third-generations typically made racial assimilation easier, at least compared to today's immigrant population.

Secondly, the spatial location of where immigrants reside today contributes to the vulnerability experienced by their descendants (Graif & Sampson, 2009; Morenoff & Tienda; Zhou, 1997). Immigrants are concentrated in central cities placing them in close proximity to concentrations of native-born minorities. This is problematic for at least two reasons. First, it results in the identification of both groups (immigrants and the native poor) as similar in the eyes of the native-born majority. Second, and perhaps more importantly, it exposes second and third-generation children to the adversarial and criminogenic subculture developed by native youths to cope with their own disadvantaged situation (see, for example, Anderson, 1999). For the purposes of the current study, this cultural exposure is an important feature of the acculturation process and context. Socialization into the culture of America's native poor may increase contact with delinquent peers thereby increasing the likelihood of participation in crime and delinquency. For the same reasons, this may also lead to a greater likelihood of victimization as well.

Lastly, immigrants today are faced with an economy that is much different from that of a century ago (Kim & Kulkarni, 2009; Light, 2004; Portes & Zhou, 1993; Zhou, 1997). Much of the industrial economy in the first half of the twentieth century was built by immigrant labor, and the children of immigrants were able to obtain relatively good paying, blue-collar jobs through the manufacturing segment of the economy. Today, however, the U.S. economy is increasingly contracted, resulting in an "hour-glass" – jobs at the top requiring advanced training and

education and jobs at the bottom paying menial, practically unlivable wages. Second and thirdgeneration immigrants, then, are often competing against a narrowing middle where their economic realities may not correspond to their U.S.-acquired aspirations (Portes & Zhou, 1993).

In light of this reality for America's new immigrants, Portes and Zhou (1993) suggest three alternative modes of adaptation. First, and consistent with the traditional assimilation hypothesis, immigrants acculturate and integrate into the white middle class. This happens most often when immigrants arrive with advanced education that enables professional or technical employment. Second, immigrants assimilate into the American underclass where they acculturate to the norms of the native born minority. This occurs when immigrants arrive with little education or skill sets. Finally, immigrants may experience relatively rapid economic advancement through deliberate preservation of the immigrant community's values and ethnic solidarity – essentially, the ethnic enclave. This mode of adaptation contributes to the development of collective efficacy and social organization within the communities where the enclaves are located.

For criminology, the last two of these adaptations are of most interest. This research examines both of these hypotheses to determine if second and third-generation Latinos experience a greater incidence of negative outcomes relative to their first-generation counterparts. More specifically, we assess whether generational status is linked to higher levels of crime and victimization. Further, we explore how the concentration of immigrants and levels of child-based collective efficacy between neighborhoods may influence crime and violent victimization among Hispanic children and adolescents. By examining the role of immigrant concentration and child-based collective efficacy, we are able to empirically explore the segmented assimilation hypothesis. If neighborhoods high in immigrant concentration and

collective efficacy are able to act as buffers against crime and victimization, we would also expect to find the opposite; Latino adolescents acculturating within neighborhoods that are low in immigrant concentration and collective efficacy and high in disadvantage will likely experience a greater range of negative outcomes, including crime and victimization.

#### Acculturation and Social, Health, and Behavioral Outcomes

The correlations between generational status, acculturation, and negative outcomes are well documented (Aldrich & Variyam, 2000; Buriel, et al., 1982; Burnam, et al., 1987; Caetano, 1987; Chappin & Brook, 2001; Kaplan & Marks, 1990). The process of acculturation has been examined relative to a number of psychological and health outcomes, including depression (Cortes, 2003), psychological distress (Gong et al., 2003), poor nutrition (Love et al., 2006), and prenatal health behaviors (Zambrana et al., 1997), among others. Overall, both generational status and linguistic assimilation (i.e., greater use of the English language) are associated with greater use and abuse of alcohol and drugs (Amaro et al., 1990; Barrett et al., 1991; Caetano, 1987; de la Rosa, 2002; Gilbert, 1987; J. Miller et al., 2008; Neff et al., 1987), higher reported levels of psychological distress (Gong et al., 2003), and non-enrollment in school (Hirschman, 2001).

Among Hispanics in particular, acculturation status has been linked to greater incidence of negative outcomes, though some evidence also suggests that this may be contingent upon ethnicity (i.e., Mexican, Puerto Rican, Cuban) (Borrell, 2005; Harris, 1998). Generally, the foreign-born tend to have a lower prevalence of psychiatric disorders (Grant et al., 2004), psychosocial disorders (Griffith, 1983), psychological distress (Kaplan & Marks, 1990), and substance abuse disorders (Burnam et al., 1987). Use of drugs and alcohol are also more common among native-born Hispanics than foreign-born immigrants. A vast literature in this

area has linked higher levels of acculturation to the use of alcohol (Caetano, 1987; Gilbert, 1987; Neff et al., 1991), marijuana (Amaro et al., 1990; J. Miller et al., 2008), inhalants (Barrett et al., 1991), cigarettes (de la Rosa, 1998; Marin et al., 1989), and cocaine (Amaro et al., 1990; J. Miller et al., 2008).

A fewer number of studies have examined acculturation and assimilation relative to criminological variables including gang membership (Lopez & Brummet, 2003; Miller et al., in press), domestic violence victimization (Hazen & Soriano, 2007; Denham et al., 2007; Grzyacz et al., 2009), fear of crime (Brown & Benedict, 2004), self-reported violence (Morenoff & Astor, 2006), and delinquency (Buriel et al., 1982). Findings from these studies are mixed. Both Lopez and Brummett (2003) and Miller and her colleagues (in press) found that Hispanic adolescents who were less acculturated were more likely to report gang membership, while others have reported a link between higher levels of acculturation and delinquent behavior more generally (Buriel et al., 1982; Morenoff & Astor, 2006). Recent immigrants are more likely to fear weapons-related violent victimization (Brown & Benedict, 2004) but the evidence is decidedly mixed in terms of actual likelihood or prevalence of victimization. For example, Ramirez (2007) found no effect for acculturation on interpersonal violence while Garcia, Hurwitz, and Kraus (2004) found that highly acculturated Latinas were more likely to report IPV. Decker and colleagues (2007) found no effect for language acculturation on sexual victimization but did find an effect for immigration status (i.e., immigrants were significantly more likely to experience sexual victimization).

A major limitation of these existing studies is that most fail to offer a theoretical framework for understanding the mixed and sometimes unpredictable findings. Unfortunately, despite widespread attention to the acculturative process over the past two decades, research has

not addressed the mechanisms linking between acculturation, crime, and victimization. Very little research to date has been specifically designed to address etiological issues in this area (Vega et al., 1998). The current research is designed to remedy the previous shortcomings and deficiencies of the extant acculturation and assimilation literatures by incorporating what is known about the experiences of today's first, second, and third-generation immigrants with what is known more generally about the etiology of offending and victimization.

#### The Context of Acculturation and Assimilation: Peers, Parents, and Neighborhoods

Utilizing segmented assimilation as our theoretical framework, we explore how neighborhood context, individual propensities, and situational factors impact crime and victimization among Latino youth. From a neighborhood perspective, segmented assimilation theory suggests that immigrant youth acculturate differentially depending on community context. Those who acculturate within disadvantaged, inner-city contexts, without strong family ties and support from other co-ethnics are likely to experience downward assimilation, resulting in more involvement in crime and other negative consequences (Morenoff & Astor, 2006). However, this relatively new area of research has not attempted to determine the social characteristics of neighborhoods that could perhaps act as mechanisms to explain this relationship.

We also examine how individual and situational factors impact the relationships between acculturation and crime and victimization. Using three well researched predictors of crime and victimization, delinquent peers, self-control, and parenting, we investigate how these may affect the relationships among assimilation status, involvement in crime, and victimization. While the acculturation process may theoretically be impacted by any number of factors, we chose delinquent peers and self-control for several reasons.

First, few criminological theories have been tested more than Akers' social learning theory (1977; 1985; 1998; Burgess & Akers, 1966) and Gottfredson and Hirschi's theory of selfcontrol (1990) and received such consistent support (Akers et al., 1979; Battin et al., 1998; Esbensen & Deschenes, 1998; Haynie, 2002; Hwang & Akers, 2003; Kim & Goto, 2000; Kornhauser, 1978; Loeber & Dishion, 1987; Loeber & Stouthamer-Loeber, 1986; McGee, 1992; Mihalic & Elliott, 1997; Pratt & Cullen, 2000; Skinner & Fream, 1997; Tittle, Burke, & Jackson, 1986; Warr, 1993a, 1993b, 1998, 2002; Warr & Stafford, 1991). Second, from a theoretical perspective, it is reasonable to expect that the presence of delinquent peers or the absence of selfcontrol may mediate the observed link between acculturation and crime. Segmented assimilation predicts that as generational status increases, immigrants may assimilate into a subculture where traditional beliefs and practices are not valued. For Hispanics, perhaps the most important of these is the family-centered orientation which enables informal control processes that serve as a buffer against delinquent peers or other negative influences. As generational status increases, adolescents are not only further removed from the influence of parents or other family members, they also tend to be without social support from co-ethnics. In circumstances such as these, it is reasonable to expect a greater likelihood of susceptibility to the influence of delinquent peers. Therefore, it is reasonable to expect that the influences of acculturation and assimilation processes on crime and victimization will be partially mediated by delinquent peers.

Relatedly, a lack of strong family ties or a family-centered orientation may impact family socialization processes as they relate to parenting or parent-child relationships. In fact, sociologists and criminologists have long documented intergenerational conflict between immigrants and their children that impacts various facets of family life, including parent-child relationships and child-rearing practices (Felix-Ortiz et al., 1998; Gans, 1992; Hentig, 1945;

Oropesa & Landale, 1997; Park & Burgess, 1924). Both parent-child relations and parenting practices have been previously shown to influence the development of self-control (Gibson et al., 2010) and thus criminality. Here, we consider the possibility that degradation of the traditional Hispanic family-centered orientation contributes to changes in parenting styles which impact the development of self-control during childhood and emerging adolescence. If parents (or primary caregivers) lack warmth towards their children and are unable or unwilling to recognize problem behavior, supervise their whereabouts, and discipline accordingly, self-control will not be instilled and the likelihood of problem behavior increased. Therefore, we may expect that the influence of individual level acculturation and assimilation processes on crime and victimization may be partially mediated by parenting and self-control.

Finally, few studies have assessed differential assimilation of Hispanic adolescents across the neighborhoods in which they reside (Morenoff & Astor, 2006). As noted by the segmented assimilation framework, the location in which immigrants reside is a central factor to understanding their experiences (Portes & Zhou, 1993; Zhou, 1997). This study focuses on several features of neighborhoods theoretically likely to influence the acculturative experiences of first, second, and third-generation Latino adolescents. Our analysis is guided, in part, by the social disorganization and segmented assimilation literatures.

Over the past decade, increasing attention has been given to understanding the neighborhood contexts in which families and their children reside (Leventhal & Brooks-Gunn, 2000, 2003; Mayer & Jencks, 1989). Recent studies show that children growing up in disadvantaged neighborhoods are more likely to engage in aggressive and delinquent behaviors (Loeber & Wikström, 1993; Wikström & Loeber, 2000), sexual activity at an early age (Browning et al., 2004), and violence (Sampson et al., 2005). In addition, children in such

neighborhoods are more likely to witness violence (Gibson et al., 2009; Selner-O'Hagan, et al., 1998), and develop mental health problems (Xue et al., 2005). Collectively, research has demonstrated that neighborhoods affect the development and quality of life of youth living in them.

Research on neighborhoods and child outcomes has largely been guided by social disorganization theory which suggests that disorganized neighborhoods inhibit or undermine the control of crime. Shaw and McKay (1942) argued that socially disorganized areas are unable to realize the common values of their residents or solve community problems. Recent studies have found that disorganized neighborhoods or communities are less cohesive (e.g., have limited social networks) and tend not to engender mutual trust among residents (Sampson et al., 1997). Consequently, neighborhood residents are less willing to act as social control agents when problems arise (Sampson et al., 1997; Sampson, Morenoff, & Earls, 1999). This helps to explain the relationship between neighborhood disadvantage and crime in that such neighborhoods often have lowered informal social controls directed at their youth and they also tend not to have cohesiveness and trust among their residents.

In a review of neighborhood influences and youth development, Wikström and Sampson (2003) argue that delinquent and criminal propensities among children are partially influenced by community socialization due to the level of collective efficacy present in the neighborhood. Collective efficacy, defined as informal social control combined with trust and willingness of residents to intervene for the common good of the neighborhood (Sampson et al., 1997), is related to the frequency in which children experience settings disadvantageous to the development of prosocial behavior. Specifically, children living in neighborhoods low in

collective efficacy are expected to encounter settings that provide less parental support and more opportunities for involvement in problematic behaviors.

A social disorganization perspective can also be informative for understanding how Hispanic adolescents assimilate differentially; however, only one study to our knowledge has attempted to apply this perspective to immigrant youth. Using data from the PHDCN, Morenoff and Astor (2006) assessed how violence among immigrant adolescents is a function of both context and acculturation. They found that as immigrants assimilate they become more violent, suggesting downward assimilation is occurring. Further, those from more fully acculturated families tend to be involved in more violent crime. They also found that context shapes the acculturation-violence relationship. Finally, they argued that segmented assimilation theory predicts that immigrant neighborhoods should serve as a protective factor for becoming involved in violence. Generally, their findings suggested that immigrant youth were less likely to engage in violence when they resided in neighborhoods with greater concentration of immigrants.

Although an important contribution to research on segmented assimilation, Morenoff and Astor's (2006) study has several limitations that we attempt to address in the current study. First, they only assessed structural conditions of neighborhoods (i.e., concentrated disadvantage and immigrant concentration) on one particular type of criminal behavior, violence. As such, this begs the question why these structural conditions act as protective and risk factors for involvement in violence? We build on this work by considering child-based collective efficacy measures, that is, collective efficacy targeting children in neighborhoods that tap into the social processes within and between neighborhoods that might account for these relationships. Second, we consider several other outcome measures that include not only violence, but also property offending and overall offending prevalence and frequency, as well as violent victimization

experiences. Third, while Morenoff and Astor (2006) made adjustments for some individual level variables, such as demographic characteristics of youth (e.g. age, sex, and race/ethnicity) and some primary caregiver characteristics (e.g., income and educational attainment), we include criminologically relevant individual-level predictors (e.g., low self-control, delinquent peers, and parenting) as well as additional primary caregiver characteristics to arrive at estimates of neighborhood influence while taking into account selection into neighborhoods. Finally, while Morenoff and Astor (2006) focused on all immigrant youth, we focus our analyses exclusively on the large Hispanic subsample of children and adolescents within the PHDCN.

#### **Extending Context to Victimization: The Victim-Offender Overlap**

Virtually no studies have been conducted on the relationship between acculturation and victimization experiences among Hispanic adolescents. As such, we apply the same theoretical arguments to violent victimization as we do for criminal involvement among Hispanic adolescents for several reasons. First, Lauritsen, Laub, and Sampson (1992) reported that theoretical constructs predictive of crime also predict victimization. Furthermore, research has shown that demographic characteristics that predict offending can also predict victimization. Michael Hindelang (1976) was perhaps the first criminologist to identify the close connection between crime and victimization. It was not until 1999, however, that a criminological theory (self-control) was reformulated to specifically explain victimization (see Schreck, 1999). Schreck's (1999) research and subsequent forays by him and others (e.g., Gibson et al., 2008; Piquero & Hickman, 2003; Schreck et al., 2002) established that Hindelang's notion about criminological theories was correct; these theories are viable frameworks for explaining individual and contextual differences in victimization.

Research focusing specifically on Hispanic victimization was virtually non-existent until the 1970s and has since produced somewhat inconsistent findings. Data gathered between the 1970s and early 1990s suggested that Hispanics were victimized at disproportionately high rates

(Walker, Spohn, & DeLone, 1996). Since the late 1990s, however, research has shown little difference between the rates of violent victimization for Hispanics and non-Hispanics (Rennison, 2002). For example, National Crime Victimization Survey (NCVS) data between 1993 and 1996 indicated that Hispanics were significantly more likely to have been the victims of aggravated assault and robbery (Perkins, Klaus, Bastian, & Cohen, 1996; Ringel, 1997). Conversely, NCVS data from the late 1990s and early 2000s showed little variation in the rates of victimization between Hispanics and non-Hispanics (Catalano, 2004; Rennison, 2002). Data from the 2005 NCVS indicated that Hispanics were victims of aggravated assault and robbery at somewhat higher rates than non-Hispanics, but that there were no significant differences in the rates of simple assault, sexual assault, or theft (Catalano, 2006).

Although few studies have forayed into the etiology of Hispanic victimization, there is good reason for academic attention to the topic. Consider the extant victimization research which has consistently shown that victimization rates are highest among certain groups such as adolescents and young adults, those with lower socioeconomic status, and those who reside in disadvantaged neighborhoods (Avakame, 1997; Karmen, 2007; Miethe & McCorkle, 1998; Sampson & Raudenbush, 1999). Consider, then, the demographic research which has consistently shown that Hispanics are disproportionately young, impoverished, and live in disadvantaged neighborhoods (Camarota, 2001; DeNavas-Walt, Proctor, & Lee, 2005, 2006; Newburger & Curry, 2000; Proctor & Dalaker, 2003; Ramirez & de la Cruz, 2003; Schmidley, 2003; Stoops, 2004). The convergence of these sociological realities offers *prima facie* evidence for the need for increased empirical focus on Hispanic crime and victimization.

### **Immigration and Crime**

The issue of immigration and crime at the macro-level has largely been studied apart from the etiology of offending within immigrant populations. This body of research can, however, inform our understanding of the ways in which macro-level factors such as neighborhood characteristics, particularly immigrant concentration, may have bearing on individual experiences. Sociologists have long considered the relationship between immigration and crime (Park & Burgess, 1924; Shaw & McKay, 1942) and early hypotheses predicted a positive association between the two. Though most empirical studies of immigrants find that the foreign-born are generally less likely than their native-born counterparts to engage in problem behavior, generally, including crime, it is not unreasonable to expect an association between immigration and crime. Immigrants tend to reside in lower-income city centers where they are exposed to the deleterious features of the inner-city experience – limited economic opportunity, segregation, poverty, and criminogenic subcultures (Alba, Logan, & Stultz, 2000; Morenoff & Tienda, 1997; Zhou, 1997). Three theoretical traditions are typically utilized to explain the immigration crime relationship: social disorganization, opportunity structure, and subculture.

The neighborhoods in which immigrants, and particularly Hispanic immigrants, typically reside tend to be socially disorganized with high levels of poverty and residential turnover (see, for example, Krivo, 1995; Logan, Zhang, & Alba, 2002; South, Crowder, & Chavez, 2005; Timberlake, 2005). These structural characteristics make it difficult for neighborhoods to engender trust and build the community institutions necessary for the exertion of informal control mechanisms. Thus, increased immigration can contribute negatively to these already strained features of the social structure. The segmented assimilation perspective is consistent

with this ecological approach to immigration and crime in that both predict the context in which immigrants find themselves may be somewhat disadvantaged. If immigrants reside in the innercity in close proximity to the native-born poor, they may experience outcomes similar to of native minorities. These effects are magnified for the second and third-generations who are acculturating within, and possibly assimilating into, urban inner-city culture without the direct link to (and possible buffer of) the home culture.

The second theoretical framework by which to understand the immigration-crime relationship involves the opportunity structure of the host country and its implications for immigrants' economic success. Immigrants, particularly Hispanic immigrants, face myriad economic hindrances upon arrival in the host country from higher levels of poverty when they first move (Clark, 1998) to labor market discrimination (Waldinger, 1993). These blocked opportunities may lead immigrants to turn to the illegitimate opportunity structure (Cloward & Ohlin, 1960; Merton, 1938) to achieve economic success. The disjuncture between goals and means, then, is responsible for immigrants' involvement in crime.

Finally, but related to the opportunity structure argument discussed above, immigrants may adopt a criminal immigrant subculture that contributes to levels of crime (Short, 1997). Organized ethnic gangs provide increased opportunities for immigrants to engage in crime; typically involving organized involvement in property and drug crime (Bankston, 1998). Relatedly, because immigrants tend to settle in inner-city areas that are proximate to native minorities, their children and grandchildren, the second and third-generation, may assimilate into a subcultural context conducive to criminal conduct.

While these perspectives are not, of course, mutually exclusive, social disorganization theory best informs the current study. Due to the nature of the PHDCN data, this research is best

able to assess the impact of immigrant concentration on neighborhood structural conditions as well as social processes such as reciprocal exchange and informal social control (Sampson et al., 1999). These, in turn, are hypothesized to affect individual levels of crime and victimization. Although this study is not a macro-level analysis of the link between immigration and crime rates, the structure of the data does allow for a multi-level estimation of social disorganization variables on individual behavior.

Though all three of these perspectives have been offered as a means of understanding the relationship between immigration and crime, evidence in support of these theories is generally lacking. The most comprehensive collection of research that addresses Latino immigration and crime is that conducted by Martinez and his colleagues (Martinez & Lee, 2000; Lee, Martinez, & Rosenfeld, 2001; Martinez, 2000, 2002, 2006; Stowell & Martinez, 2007). These studies, which focus primarily on violent crime, have indicated that Hispanics are victims of homicide at rates higher than that of whites but lower than non-Hispanic blacks despite living in structurally similar neighborhoods (Martinez, 2002). Martinez's studies have also indicated that immigration exerts a direct negative effect on violent crime in some cities (i.e., Miami) while an insignificant effect is found for others (i.e., El Paso and San Diego). Recently, Stowell and Martinez (2007) reported a variable effect for immigration on robbery and homicide that was contingent upon ethnicity and location. Collectively, these studies suggest that immigration has little or no effect on rates of violent crime. Moreover, this research also indicates that immigration may in fact lessen violent crime in some instances.

Recent studies also have produced findings consistent with those mentioned above (see, for example, Chavez & Griffiths, 2009; Olson, Laurikkala, Huff-Corzine, & Corzine, 2009; Velez, 2009). These analyses have indicated that new immigrants are actually less likely to

commit crime (Olson et al., 2009) and that growth in immigration has not been associated with aggregate-level increases in either crime or violence (Akins, Rumbaut, & Stansfield, 2009; Chavez & Griffiths, 2009; Feldmeyer & Steffensmeier, 2009; Nielsen & Martinez, 2009; Stowell & Martinez, 2009; Velez, 2009). Research that has explicitly examined the role of immigrant concentration on crime has also found that neighborhoods dense with immigrants are often less affected by crime than others (Feldmeyer & Steffensmeier, 2009; Graif & Sampson, 2009).

Other researchers have examined the impact of immigration on criminological variables beyond rates of homicide. Using the same data as the current study (PHDCN), Sampson and Raudenbush (1999) report an inverse relationship between immigrant concentration and robbery rates. This same research also found support for other aspects of social disorganization theory such that poverty and residential instability (but not immigrant concentration) exerted a positive effect on violent crime. Other research indicates that the size of the illegal immigrant population does not impact either violent or property crime arrest rates (Hagan & Palloni, 1998) nor has changes in the size of the immigrant population (Butcher & Piehl, 1998). In a recent study, Reid and her colleagues (2005), using various measures of immigration, found no effect for immigration on homicide, robbery, burglary, or theft rates in 150 Metropolitan Statistical Areas (MSAs) and Primary Metropolitan Statistical Areas (SMSAs). Consistent with other empirical results (Lee et al., 2001; Martinez & Lee, 2000; Sampson & Raudenbush, 1999; Stowell & Martinez, 2007), this research also found that some aspects of immigration actually lessened crime in certain areas.

The totality of the evidence produced by these studies suggests that immigration fails to exert a positive effect on rates of crime across time and location. Beyond disproving the popular conception that increased immigration necessarily leads to crime, this research also raises the

question as to whether some aspects of immigration actually enhances public safety by reducing rates of crime. These findings, contrary to that predicted by ecological explanations of crime, are theoretically linked to the segmented assimilation perspective and are important to the current analyses.

Recall that segmented assimilation predicts that immigrant outcomes are dependent upon a number of factors which include the skills that immigrants bring with them and the structural circumstances in which they find themselves upon arrival. For example, if an individual immigrates to an area with an entrenched immigrant community where an ethnic economy exists, they may be less likely to experience hardship at least with respect to economic opportunities. Acculturating within this context can also lessen the cultural discord common to those who assimilate into the world of the native poor. With respect to crime and victimization, it is possible that the same structural characteristics (i.e., immigrant concentration) that lower macrolevel rates of crime also impact individual experiences. This research is designed to explicitly test the hypothesis that increased concentration of immigrants at the neighborhood-level exerts an inverse effect on individual experiences related to crime and victimization.

#### The Current Study

The current study represents an effort to integrate the vast knowledge base on immigration, acculturation, crime, and victimization. Drawing from segmented assimilation, social disorganization, differential association, and self-control, this project is designed to examine five research questions. First, we want to know if Hispanic children and adolescents who are more acculturated are also more likely to engage in criminal behavior and experience violent victimization? Second, if so, do delinquent peers, low self-control, and parenting variables mediate the relationship between acculturation status and criminal involvement and violent victimization? Third, regarding contextual effects, does criminal involvement and violent victimization experiences among Hispanic children and adolescents vary by the neighborhoods in which they reside, regardless of individual risk factors? Fourth, if so, what neighborhood structural and social factors account for differences in criminal involvement and violent victimization across neighborhoods? Based on past research, we hypothesize that Hispanics residing in areas with higher concentrations of immigrants will be less likely to engage in criminal behavior and experience less violent victimization than those living in more ethnically diverse neighborhoods. Conversely, those living in neighborhoods that are highly disadvantaged with fewer immigrants are more likely to engage in crime and experience violent victimization. We also want to identify which, if any, social factors of neighborhoods mediate the relationship between immigrant concentration and concentrated disadvantage on criminal involvement and victimization?

#### **III. RESEARCH DESIGN AND METHODS**

#### Data: The Project on Human Development in Chicago Neighborhoods

Data for the current analysis are from the Project on Human Development in Chicago Neighborhoods (PHDCN), an interdisciplinary study on how the contexts in which children and adolescents reside contribute to their behavior and psychological development. These data are appropriate for assessing the influence of neighborhood factors, acculturation, and potential mediating variables on the perpetration of offending and violent victimization experiences among Hispanic adolescents for several reasons. First, the longitudinal cohort study consists of a large number of Hispanic children and adolescents (i.e., approximately 45% of the sample) that vary in their levels of acculturation. Second, a wealth of neighborhood structural, organizational, and social process measures exist that have been validated over time, making the PHDCN a unique study on neighborhood processes (Raudenbush & Sampson, 1999; Sampson et al., 1997).

The PHDCN has two sampling components: selection of neighborhood clusters and selection of dwellings. First, 847 census tracts were combined to create 343 neighborhood clusters (NC's). NC's averaged approximately 8,000 people each<sup>1</sup> (see Sampson et al., 1997). A stratification sampling procedure generated a representative sample of racially, ethnically, and socioeconomically diverse Chicago neighborhoods<sup>2</sup> (Molnar, Buka, Brennan, Holton, & Earls,

<sup>&</sup>lt;sup>1</sup> NC's are quite different from the traditional community areas of Chicago that have approximately 40,000 people each. NC's are composed of geographically contiguous census tracts that are relatively homogenous to one another. <sup>2</sup> As part of the PHDCN design, it was important to have a diverse sample of neighborhoods that varied by race and ethnic composition as well as socioeconomic status. As such, stratums were created using seven categories of racial/ethnic composition and 3 categories of socioeconomic status which resulted in 21 strata where each NC fit into one of the strata. For instance, 77 NCs are 75% Black and on average have low socioeconomic status. In addition, no NCs were 75% Hispanic and on average high socioeconomic status; likewise, no NCs are partially Hispanic and Black that are on average high socioeconomic status.

2003; Sampson et al., 1997; Sampson, Morenoff, & Earls, 1999). From the 343 NCs, a stratified probability sample of 80 was selected for more intensive study.

Second, block groups were randomly selected from each of the 80 NCs. Within each sampled block group a list of dwellings was compiled and household members were enumerated. In total, approximately 40,000 dwellings were screened. Infants, children, and adolescents (including 18 year olds) were recruited to participate. Subjects were recruited if they were within approximately six months of the following age categories: 0, 3, 6, 9, 12, 15, 18 years. Data collection for the longitudinal study began in 1994-1995, the second wave of collection occurred between 1997 and 1999, and the third wave of data was collected between 2000 and 2001. Each wave of data collection occurred approximately 2.5 years apart. This resulted in seven cohorts that span a period of development between infancy and early to mid adulthood<sup>3</sup>.

### Analysis Sample

Our analysis sample is limited to 763 Hispanic children and adolescents in the 9, 12, and 15 year-old cohorts from waves 1 and 2 (and their primary caregivers)<sup>4,5</sup>. Our analysis sample is 70% Mexican, 19 % Puerto Rican, and 9% other Hispanic (e.g, Spain, Central American, South American, and other). As shown in Table 1, the analysis sample consists of 51.2 % males and ranges in age from approximately 8 to 15  $\frac{1}{2}$  years of age at wave 1, with an average of 12 years of age. The primary caregivers of these children were primarily Hispanic. These children and

<sup>&</sup>lt;sup>3</sup> At wave 1 of data collection there were 1,269 subjects in cohort 0, 1,003 subjects in cohort 3, 980 subjects in cohort 6, 828 subjects in cohort 9, 820 subjects in cohort 12, 696 subjects in cohort 15, 632 subjects in cohort 18. <sup>4</sup> Due to attrition, the original sample of 2,345 subjects in cohorts 9, 12, and 15 was reduced to 1,895. After selecting for only Hispanic children and the use of regression imputation for missing data, we arrived at a sample of 763 Hispanic subjects for our analysis.

<sup>&</sup>lt;sup>5</sup> The decision to use data from subjects in the 9, 12, and 15 year old cohorts was based on the following criteria. First, these age groups are generally most at risk for involvement in delinquency, crime and victimization. Second, some important measures of interest in the current study are not available for some of the youngest cohorts and the 18 year old cohort. In addition, to establish temporal ordering, we will use data collected from waves 1 and 2 where victimization and crime are our outcomes at wave 2 and individual variables measured at wave 1 are our predictor variables.

their families resided across 59 of the 80 neighborhood clusters that were randomly selected for

the longitudinal study.

	Mean	SD	Min	Max
Dependent Variables				
Violent Victimization (prevalence)	.222	.416	0	1
Offending Prevalence				
Offending	.291	.454	0	1
Violent Offending	.212	.409	0	1
Property Offending	.177	.381	0	1
Offending Frequency				
Offending	4.547	25.276	0	395
Property Offending	1.919	16.026	0	365
Violent Offending	2.832	15.058	0	1 <b>96</b>
Individual-Level Independent Variable	3			
Generational Status				
1 <sup>st</sup> Generation	.242	.429	0	1
2 <sup>nd</sup> Generation	.701	.458	0	
3 <sup>rd</sup> Generation	.056	.231	0	1
<b>T A 1</b> , , <b>1</b>				1
Language Acculturation	0	1	-2.939	-1.846
Language Acculturation Sex	0 .512		-2.939 0	-
	-	1		-1.846
Sex	.512	1 .500	0	-1.846 1
Sex Age	.512 11.928 38.287 .730	1 .500 2.415	0 7.773	-1.846 1 15.690
Sex Age PC Age	.512 11.928 38.287	1 .500 2.415 6.670	0 7.773 19.080	-1.846 1 15.690 73.310`
Sex Age PC Age PC Married PC Employed	.512 11.928 38.287 .730	1 .500 2.415 6.670 .444	0 7.773 19.080 0	-1.846 1 15.690 73.310` 1
Sex Age PC Age PC Married PC Employed Socioeconomic Status Delinquent Peers	.512 11.928 38.287 .730 .595	1 .500 2.415 6.670 .444 .491	0 7.773 19.080 0 0	-1.846 1 15.690 73.310` 1 1
Sex Age PC Age PC Married	.512 11.928 38.287 .730 .595 741	1 .500 2.415 6.670 .444 .491 1.175	0 7.773 19.080 0 0 -3.160	-1.846 1 15.690 73.310` 1 1 2.932
Sex Age PC Age PC Married PC Employed Socioeconomic Status Delinquent Peers	.512 11.928 38.287 .730 .595 741 0	1 .500 2.415 6.670 .444 .491 1.175 1	0 7.773 19.080 0 0 -3.160 -1.672	-1.846 1 15.690 73.310` 1 1 2.932 4.657
Sex Age PC Age PC Married PC Employed Socioeconomic Status Delinquent Peers Low Self-Control	.512 11.928 38.287 .730 .595 741 0 0	1 .500 2.415 6.670 .444 .491 1.175 I 1	0 7.773 19.080 0 -3.160 -1.672 -2.332	-1.846 1 15.690 73.310` 1 1 2.932 4.657 2.966

Table 1. Descriptive Statistics (n = 763)

PC represents primary caregiver

#### Measures

### **Dependent Variables**

*Violent Victimization.* Violent victimization is measured using responses to six questions from the Exposure to Violence (ETV) interview administered to subjects during wave 2 and was developed by members of the PHDCN scientific team. Questions ask subjects in the past 12 months have you been: hit, slapped or beaten up, attacked with a weapon, shot, shot at, sexually assaulted, and if someone has threatened to seriously hurt you. Responses to each were coded 0 (no) or 1 (yes). Given that approximately 78% (n = 593) of our sample reported not being a victim of any of the six types of violent victimizations and that very few experienced two or more of these<sup>6</sup>, we decided to use a prevalence measure indicating whether or not subjects reported being violently victimized in the past 12 months. To this end, 22% (n = 170) of Hispanic children and adolescents reported being victim of one or more of the six types of violents reported being victim of one or more of the six types of violents reported being victim of one or more of the six types of violents reported being victim of one or more of the six types of violents reported being victim of one or more of the six types of violents reported being victim of one or more of the six types of violents reported being victim of one or more of the six types of violents reported being victim of one or more of the six types of violents reported being victim of one or more of the six types of violent victimizations in the 12 months prior to wave 2 interviews.

Self-Report Offending. Using a Self-Report Offending (SRO) instrument (Huizinga, Esbensen, & Weihar, 1991), prevalence and frequency of criminal behavior is measured using questions that asked subjects to self-report their property, violent, and drug offending in the 12 months prior to wave 2 interviews. In the current study, prevalence of offending is simply the distinction between those who have and have not reported engaging in any offending behavior discussed below in the past 12 months, or it can also be described as the percentage of individuals that self-reported engaging in any of the measured offending behaviors in this study within the past 12 months. Our offending prevalence measure should not be confused with a

<sup>&</sup>lt;sup>6</sup> In the 12 months prior to wave 2 interviews, 3% (n=27) reported experiencing two of the six victimizations, .66% (n=5) reported experiencing three of the six victimizations, and .79% (n=6) reported experiencing four of the six victimizations. No subject reported being a victim of five or all six.

life-time prevalence or participation measure, but rather it is more in line with the notion of current participation (or offending prevalence within a particular time period). Not to be mistaken with lambda (i.e., offending frequency of active offenders), frequency of offending in the current study is simply a count of the number of times an individual reported engaging in offending behaviors described below within the past 12 months. Our decision to trichotomize offending into three different groupings (i.e., total self-report offending, property offending, and violent offending) was two-fold. First, several of our theoretically derived variables are from general theories (i.e., self-control and social learning theories) that propose to explain a variety of offending behaviors; therefore, it is important to understand whether variables such as selfcontrol and delinquent peers influence a variety of offending outcomes for Hispanic adolescents. Second, and related, research on the versatility and specialization in offending was also considered in this decision. Given mixed results some research that individuals are more likely to be versatile rather than specialize in offending, it was important to have multiple measures of offending to reflect these important criminological issues (Sullivan, McGloin, Ray, & Caudy, 2009).

The total self-report offending measure combines twenty-two different offenses: twelve violent offenses (e.g., shot someone; been in a gang fight; attacked someone with a weapon), six property offenses (e.g., purposely damaged or destroyed property not belonging to you; stolen something from a store; and entered or broken into a building to steal something), and three drug selling offenses (e.g., sold marijuana, crack/cocaine, or heroin) (see Appendix B for all items). Questions were asked of each subject if he/she committed a specific offense and, if so, how many times he/she committed that offense. Of the twenty-two total offenses, 29% (n = 222) of
the sample reported committing at least one of them and the average number of offenses reported was 4.54 offenses in the last year (SD = 25.27). For violent offending, 21% (n = 162) reported committing at least one of them, 17% (n=134) reported committing at least one of the property offenses, and approximately 2% reported committing at least one of the drug offenses (n=18). Regarding offending frequency at wave 2, within the past 12 months the average number of reported total, violent, property, and drug offenses is 4.546 (SD = 25.276), 2.832 (SD = 15.058), 1.918 (SD = 16.025), and .777 (SD = 10.970), respectively.

## **Independent Variables**

## **Neighborhood-Level Characteristics**

*Neighborhood Structural Variables*. Two measures from the 1990 U.S. Census are used to measure structural characteristics of NCs: concentrated disadvantage and immigrant concentration. Each measure was originally created by Sampson et al. (1997), have been frequently used for studies conducted with the PHDCN data (Sampson et al., 1997; Sampson, Morenoff, & Raudenbush, 2005), and have been shown to have adequate psychometric properties (Sampson et al., 1997). *Concentrated disadvantage* is measured using six items, including percentage neighborhood residents below the poverty line, percentage on public assistance, percentage of female-headed families, percentage unemployed, density of children by percentage younger than 18, and percentage Black. Immigrant concentration is measured using the percentage foreign born and Latinos residing in a neighborhood cluster<sup>7</sup>.

*Neighborhood Social Process.* Three social process variables of neighborhoods are measured that indicate child-based collective efficacy (Gibson, Sullivan, Jones, & Piquero, 2010; Sampson, Morenoff, & Earls, 1999). These measures include intergenerational closure,

<sup>&</sup>lt;sup>7</sup> With the data we had access to, we were unable to disaggregate these measures into their components. Thus, we were limited in how we were able to use these measures in our analysis.

reciprocal exchange, and child-centered social-control. Sampson et al. (1999) argue that these neighborhood dimensions will affect the lives and development of children (see Appendix B for individual items)<sup>8</sup>.

According to Sampson et al. (1999), intergenerational closure, measured using a 5-item scale, assesses the closeness of parents and children within a community, and it is argued that this closeness is important for neighborhood control of children beyond parental childrearing practices and monitoring by providing social support for children, information to parents, and help in facilitating control. Items are coded on a five-point, Likert-type scale ranging from strongly disagree to strongly agree. *Reciprocal exchange* is measured by a 5-item scale that assesses the interaction of families with respect to childrearing (both parent and children). These exchanges can range from giving advice, material goods, and information on childrearing. Items are coded on a four-point scale and responses ranged from never, rarely, sometimes, or often. Child-centered social control relates to the collective willingness of neighborhood residents to intervene on behalf of children beyond intervention by a child's parents (Sampson et al., 1999). Furthermore, this measure represents a neighborhood's willingness to take action to help monitor and look after children. Residents were asked, on a five-point scale how likely (very unlikely to very likely) that their neighbors would do something if youth were engaging in various, inappropriate behaviors. For all three measures, scale scores are aggregated to the NC level and higher scores, on all measures, reflect more child-based collective efficacy.

<sup>&</sup>lt;sup>8</sup> Neighborhood social processes are measured using data collected from the 1995 community survey of the PHDCN that was administered to approximately 8,782 study participants representing all of the 343 NCs. The goal was to generate a representative sample of households within each NC. In contrast to the US census data, the survey data were collected to obtain a better understanding of Chicago neighborhoods as defined by residents themselves. Valid and reliable scales have been created using these data by aggregating individual residents' responses to the NC level (see Raudenbush and Sampson, 1999; Sampson et al., 1999).

# **Individual-Level Characteristics**

# Linguistic Assimilation and Acculturation Status

*Linguistic Assimilation*. Linguistic assimilation is measured using three questions that were administered at wave 2 which ask subjects about the various contexts in which they use English: in school, with friends, and at home. Response options include 1 (other language only), 2 (other language and English), and 3 (English only). The average item response to the three items was approximately 2, indicating that, on average, across contexts subjects used at least two types of language. For analysis purpose, the responses were summed and standardized with a mean of 0 and standard deviation of 1 ( $\alpha = .61$ ). Increasingly more positive scores indicate that a subject is more likely to use English; whereas, more negative scores below the mean indicate that a subject is less likely to use English<sup>9</sup>.

Acculturation (Generational) Status. Consistent with previous research, generational status is used to as an indicator of acculturation (Kaplan & Marks, 1990; Collins & Shay, 1994; Guendelman & Anrams, 1995; Landale et al., 1999; Morenoff & Astor, 2006). Using data from the demographic and cultural information instrument in the PHDCN administered at wave 1, generational status is measured using items that assessed at what age, if any, family members moved into the United States from another country. Children and adolescent subjects who themselves were born outside of the United States were coded first-generation. Those who were born in the U.S. but had at least one parent who immigrated from outside the U.S. were coded as second-generation. Participants who were born in the U.S. with parents who were both born in

<sup>&</sup>lt;sup>9</sup> As originally proposed, we also considered a measure of linguistic assimilation used by Morenoff and Astor (2006), a nine item measure of linguistic assimilation of families (see Appendix B for individual items). We believe these items to be limited due to the fact that they are survey questions that ask primary caregivers which language they spoke the most, how good their English was, and how often they used English in various contexts. These items did not specifically ask about their children's linguistic assimilation as do the self-report items we use in our analysis. Although not reported, we did run analyses with the primary caregiver measure, and we observed no statistically significant effects of linguistic assimilation on victimization and offending.

the U.S, and having any number of grandparents born outside the United States were considered third-generation American. Due to the small numbers of subjects in this category no distinction was made between those who reported all four grandparents originating in other countries and those who reported some being born in the U.S. The analysis sample is 24% (n = 185) first-generation, 70% (n = 535) second-generation, and 5.6% (n = 43) third-generation or greater.

*Low Self-Control.* Consistent with past research (Gibson, Morris, & Beaver, 2009; Gibson, Sullivan, Jones, & Piquero, 2010), low self-control is measured using 17 behavioral items from the EASI-temperament instrument administered at wave 1 to primary caregivers who were asked to report on their children (see also Buss & Plomin, 1975). The questions that make up the low self-control scale tap into inhibitory control, decision time, sensation seeking, and persistence (see appendix B for individual items), which are consistent with Gottfredson and Hirschi's (1990) definition of self-control, as well as past empirical research (see Grasmick et al., 1993)<sup>10</sup>.

Inhibitory control reflects the inability to delay gratification and control frustrations, such as trouble controlling impulses, can't stand waiting, and having trouble resisting temptations. Decision time items tap into the (in) ability to delay decision making until alternatives can be seriously considered such as saying the first thing that comes into my head, has trouble making up my mind, and often acts on the spur of the moment. Inhibitory control and decision time reflect what Gottfredson and Hirschi (1990) refer to as impulsivity, a main component of low self-control.

Sensation seeking, or what Gottfredson and Hirschi (1990) call risk seeking, reflects a preference for novel stimuli and responses such as seeking new and exciting sensations and

<sup>&</sup>lt;sup>10</sup> Self-control has been measured in past studies using a variety of behavioral and attitudinal items (Pratt & Cullen, 2000). Researchers have found that behavioral and attitudinal measures of self-control perform similarly and that there is little evidence that one is more highly valued than the other (Tittle, Ward, & Grasmick, 2003).

experiences, doing "crazy" things just to be different, and willingness to try anything once. Persistence, or what Gottfredson and Hirschi (1990) refer to as diligence, is the likelihood that a child will follow through or complete a task. Children with low self-control are often the first to initiate a task, but also the first to abort the task because they find it dull and boring, especially when the task is not associated with immediate gratification.

For each subject, item responses were summed and standardized so that the mean is 0 and standard deviation is 1 ( $\alpha$  = .68). Increasingly more positive scores indicate lower self-control; whereas more negative scores indicate higher self-control. Other studies using the PHDCN also find this measure to be reliable (also see Gibson et al., 2010; Gibson et al., 2009).

*Delinquent Peers*. Peer delinquency is measured using 19 items from the Deviance of Peers instrument which is a self-report interview administered to children and adolescents to obtain information regarding delinquent activities (minor and serious delinquency) of their peers (Huizinga, et al., 1991) (see appendix B for individual items). Subjects were asked in the past 12 months how many of their peers engaged in trivial forms of delinquency, property and violent crimes, as well as, drug related offenses. Responses to questions ranged from 1 (none of them) to 3 (all of them). Examples of items include, in the past year how many of your friends you spend time with have done the following things: skipped school; stolen something worth \$5 but less than \$500; hit someone with the idea of hurting them; sold drugs, such as heroin, cocaine, or crack. Responses to items were summed and then standardized with a mean of 0 and standard deviation of 1 ( $\alpha$  = .87). Increasingly more positive scores indicate having a larger proportion of delinquent peers; whereas more negative scores indicate having less delinquent peers.

*Parenting*. Parenting measures are taken from the Home Observation for Measurement of the Environment (HOME) Inventory (Caldwell & Bradley, 1984) to measure parenting

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behaviors. Several scales within the HOME have been validated in past studies (Leventhal, Selner, O'Hagan, Brooks-Gunn, Bingenheimer, & Earls, 2004). This inventory is generally designed to measure the quantity and quality of stimulation in a child's home environment from primary caregivers.

Three scales are used to measure parenting practices. Parental sensitivity and responsiveness is one domain of parenting measured by the HOME inventory which consists of parental warmth and parental lack of hostility (and punitiveness). Parental warmth is measured using 9 items derived from observations of parents during the in-home interviews of parents and children at the initial wave of data collection. Likewise, parental lack of hostility consists of several observational items that interviewers recorded during the in-home interviews. Finally, parental supervision consists of a scale of thirteen items where primary caregivers self-reported on how they directly and indirectly monitor and supervise their children. Specifically, this measure reflects primary caregiver's knowledge of their child's whereabouts, familiarity with child's friends, and rules surrounding curfews and activities with friends (see appendix B for individual items). Each measure was summed and then standardized with a mean of 0 and standard deviation of 1. Increasingly more positive scores on each measure indicate more supervision, more warmth and less hostility; whereas more negative scores indicate less supervision, less warmth, and more hostility.

*Demographic Characteristics*. Socioeconomic status is measured using the principal component of three variables including household income, maximum education level of primary caregiver and partner, and the socioeconomic index (SEI) for primary caregiver's and partner's

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jobs<sup>11</sup>. Gender of the subject is coded 0 (female) or 1 (male). Finally, age of subject at wave 1 is measured as a continuous variable.

## **Control Variables**

*Primary Caregiver Characteristics.* While it is possible that neighborhoods in which children and adolescents reside may influence their involvement in crime and the likelihood of victimization beyond acculturation and other theoretically derived variables (Leventhal & Brooks-Gunn, 2000), we must also rule out variables that potentially influence selection of families into neighborhoods. Families and parents will to a certain degree select themselves into or determine where they reside. Families often have limited choices in where they live and these choices may be a partial function of educational, employment, and financial situations of families. Factors that influence families' choice of residence can also influence the criminal behavior and victimization of their children. To empirically address this problem, we introduce control variables that may be related to primary caregiver's selection into neighborhoods and to their children's outcomes. To this end, if a neighborhood effect is observed it has a lesser chance of being explained by selection processes.

Primary caregiver variables at wave 1 included to address selection are the following: age, marital status, and employment. Age is a continuous variable ranging from approximately 19 to 73 years of age. The average age of primary caregivers is 38 (SD = 6.67). Marital status is coded 0 (unmarried) or 1 (married), and 73 % (n = 557) of primary caregivers reported being married. Employment status is coded 0 (unemployed) or 1 (employed), and 60% (n = 454) of primary caregivers reported being employed.

<sup>&</sup>lt;sup>11</sup>See <u>http://www.icpsr.umich.edu/PHDCN/imputations.htmlhttp://www.icpsr.umich.edu/PHDCN/imputations.html</u> for a detailed explanation of the computation and imputation of this index.

## **Analytic Strategy**

Recall that our research questions focus on both neighborhood and individual level variables to explain criminal behavior and victimization of Hispanic children and adolescents. Due to our questions, the nested structure of the PHDCN research design, and limitations of past research assessing assimilation influences on behaviors, our analysis requires us to model, account for, and/or adjust for the *between-* and *within-neighborhood* differences in Hispanic children and adolescents involvement in crime and victimization. Simultaneously considering neighborhood and individual predictors in traditional regression models can violate assumptions that, in turn, can lead to invalid results (Raudenbush & Bryk, 2002). Due to some Hispanic adolescents living in the same Chicago neighborhood they will not be completely independent of one another. In other words, children living in one neighborhood are more similar to each other than to those living in other neighborhoods. Such patterns can result in correlated error terms which manifest in biased standard errors in traditional regression approaches.

Our analysis proceeds using multiple steps, and it begins by focusing on violent victimization and then criminal offending outcomes. First, unconditional Hierarchical Generalized Linear Models (HGLM) are estimated to assess whether statistically significant variance is observed for the prevalence of violent victimization across neighborhoods. Second, if the variance component from the unconditional HGLM is non-significant then traditional logistic regression analysis will be conducted in a stepwise fashion where each model will be estimated using Huber-White corrections for standard errors<sup>12</sup>. To this end, a series of models will be estimated that allow us to answer whether acculturation and assimilation variables predict violent victimization and, if so, does low self-control, delinquent peers, and parenting variables mediate

<sup>&</sup>lt;sup>12</sup> Given the fact that children and adolescents are still nested within neighborhoods a correction must be made for artificially deflated standard errors that could result in invalid results.

them. Third, if significant variation in violent victimization exists across neighborhoods, we estimate a conditional multilevel HGLM that first takes into account individual level variables to address research questions on acculturation and assimilation. If significant variation in violent victimization still exists, we investigate further our research questions on neighborhood differences in violent victimization net of individual level variables. This process is repeated for criminal offending outcomes using the same steps but with appropriate adjustments for the type of dependent variable (binary or count variables).

#### **IV. RESULTS**

#### **Violent Victimization Analysis**

Prior to estimating models to assess influences of acculturation and neighborhood factors on the prevalence of wave 2 violent victimization, it was important to estimate an unconditional HGLM model to determine whether violent victimization of Hispanic children and adolescent varies across neighborhood clusters. The analysis revealed that violent victimization did not significantly vary across neighborhoods clusters; therefore, no empirical evidence was present to explore neighborhood structural and social characteristics on violent victimization. Thus we proceed to an investigation of the proposed links between individual-level acculturation and assimilation processes and crime and victimization

Table 2 shows results from a logistic regression analysis predicting wave 2 violent victimization prevalence that adjusts for the fact that Hispanic children and adolescents reside in a variety of neighborhood clusters in Chicago. Specifically, this model assesses the baseline influences of generational status and linguistic assimilation net of various demographic characteristics of subjects and their primary caregivers. First, generational status does have a positive and statistically significant influence on self-reported violent victimization. Second-generation Hispanic immigrants are more likely than their first-generation counterparts to report being victims of violence at wave 2 (OR =1.691; p < .05); however, third-generation immigrants are no more likely to report being victims of violence than first-generation immigrants. Second, our measure of linguistic assimilation is not significantly associated with violent victimization. Third, as anticipated by prior research, both sex and age have positive and statistically significant influences on reported violent victimization. Hispanic males are more likely than females to report being a victim of violence (OR = 1.532; p < .05). Older Hispanic children and adolescents

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are more likely than their younger counterparts to report being a victim of violence (OR = 1.212;

p < .05).

During Past 12 Months ( $n = 763$ ).			
	OR	RSE	
Generational Status			
2 <sup>nd</sup> Generation	1.691*	.433	
3 <sup>rd</sup> Generation	1.524	.713	
Language Acculturation	1.021	.119	
Sex	1.532*	.266	
Age	1.212*	.042	
PC Age	.992	.016	
PC Married	.805	.168	
PC Employed	1.123	.225	
Socioeconomic Status	.992	.021	

## Table 2. Logistic Regression Predicting Wave 2 Violent Victimization Prevalence

\* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = primary caregiver

Table 3 shows results from three separate logistic regression models predicting wave 2 self-reported violent victimization prevalence. Specifically, these models assess if our theoretically derived measures of delinquent peers, self-control, and parenting variables mediate the association between generational status and violent victimization. Model 1 in Table 3 shows that the inclusion of delinquent peers mediates the influence of generational status on violent victimization. That is, when the proportion of delinquent peers is controlled second-generation

Hispanic immigrant children and adolescents are no more likely than their first-generation counterparts to be violently victimized. Delinquent peers has a positive and statistically significant influence on violent victimization, indicating that Hispanic children and adolescents with a larger portion of delinquent peers are at more risk for becoming violently victimized (OR = 1.340; p < .05). Again, males and older adolescents are more likely to report being violently victimized.

Model 2 in Table 3 shows that low self-control does not mediate the association between generational status and violent victimization. Levels of self-control cannot explain the significant difference between second and first generation Hispanic children and adolescents self-reported violent victimization (OR = 1.665; p < .05). Furthermore, Hispanic children and adolescents who have lower self-control are no more likely to be violently victimized than those who have more self-control. Again, males and older adolescents are more likely to report being violently victimized when compared to females and younger children and adolescents.

Model 3 in Table 3 shows that parenting variables do not mediate the association between generational status and violent victimization. Parental warmth, supervision, or hostility cannot account for the significant difference between second- and first-generation Hispanic immigrant children and adolescents self-reported violent victimization (OR = 1.709; p < .05). Further, parenting variables do not significantly influence violent victimization. Again, males and older adolescents are more likely to report being violently victimized compared to females and younger children and adolescents.

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## Table 3. Logistic Regression Predicting Wave 2 Violent Victimization Prevalence

	Model 1	Model 2	Model 3	Model 4
	Delinquent Peers	Self-Control	Parenting	Full Model
Generational Status	OR RSE	OR RSE	OR RSE	OR RSE
2 <sup>nd</sup> Generation	1.566 .404	1.665* .424	1.709* .446	1.565 .410
3 <sup>rd</sup> Generation	1.468 .694	1.438 .681	1.571 .739	1.470 .693
Language Acculturation	1.001 .115	1.023 .119	1.021 .117	1.003 .114
Sex	1.453* .245	1.505* .264	1.527* .266	1.432* .245
Age	1.134* .040	1.215* .043	1.210* .044	1.134* .043
PC Age `	.989 .015	. <b>994</b> .016	.992 .016	.991 .015
PC Married	.875 .174	.836 .171	.798 .160	.884 .180
PC Employed	1.141 .238	1.134 .230	1.126 .226	1.154 .242
Socioeconomic Status	.983 .072	.980 .071	.989 .073	.968 .073
Delinquent Peers	1.340* .133			1.395* .140
Low Self-Control		1.134 .082		1.085 .089
Parenting				
Warmth			.933 .082	.941 .078
Supervision			1.033 .118	1.046 .122
Hostility			1.087 .104	1.144 .118
Wald $\chi^2$	67.72*	67.11*	59.38*	75.97*
Pseudo R <sup>2</sup>	.059	.047	.047	.063

# During Past 12 Months: Assessing Mediating Influences (n = 763).

\* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = primary caregiver

Finally, results from Model 4 in Table 3 are quite similar to model 1. Generational status, again, is no longer statistically significant; its influence is accounted for by the inclusion of delinquent peers. Sex (OR = 1.432; p < .05) and age (OR = 1.134; p < .05) maintain their associations with violent victimization.

#### **Criminal Offending Analysis**

#### Predicting the Prevalence of Criminal Offending

Prior to estimating models that assess the influences of acculturation and neighborhood factors on the prevalence of wave 2 offending, it was important to estimate unconditional HGLM models to determine whether types of offending (i.e., total, property, and violent offending) among Hispanic children and adolescents varies across neighborhood clusters. Analyses revealed that total offending, property offending, and violent offending prevalence measured at wave 2 did not significantly vary across neighborhood clusters; therefore we had no empirical reason to explore the direct influence of neighborhood structural and social characteristics on offending prevalence.

Table 4 shows results from a logistic regression analysis predicting wave 2 offending prevalence that adjusts for the fact that Hispanic children and adolescents reside in a variety of neighborhood clusters in Chicago. As described in the methods section, offending prevalence at wave 2 distinguishes between Hispanic children and adolescents that reported engaging in at least one property, violent, or drug offense in the 12 months prior to being interviewed.

#### Table 4. Logistic Regression Predicting Past 12 Months Total Self Reported

	(		
	Odd Ratio	RSE	
Generational Status			
2 <sup>nd</sup> Generation	1.935 *	.444	
3 <sup>rd</sup> Generation	3.479*	1.359	
Language Acculturation	.957	.070	
Sex	1.919 *	.286	
Age	1.274 *	.043	
PC Age	1.017	.015	
PC Married	.630	.145	
PC Employed	1.107	.180	
Socioeconomic Status	1.141	.095	
Wald $\chi^2 = 112.78$			
Pseudo $R^2 = .099$			

Offending Prevalence (n = 763).

# \* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = Primary Cargeiver

The model in Table 4 assesses the baseline influences of generational status and language acculturation net of various child and adolescent demographic characteristics and characteristics of their primary caregivers. First, generational status does have a positive and statistically significant influence on self-reported offending prevalence. Second-generation Hispanic immigrants are more likely than their first-generation counterparts to report offending at wave 2 (OR = 1.935; p < .05). Additionally, third-generation immigrants are significantly more likely to report offending compared to first-generation immigrants (OR = 3.479; p < .05). It is also important to note that the likelihood of offending increases from second to third-generation when

both are compared to first generation Hispanic immigrants. Second, and consistent with the victimization analysis, our measure of linguistic assimilation was not significantly associated with offending. Third, both sex and age have positive and statistically significant influences on reported offending prevalence at wave 2. Males are more likely than females to report offending (OR = 1.919; p < .05). Older subjects are more likely than their younger counterparts to report involvement in offending behavior (OR = 1.274; p < .05). Finally, one primary caregiver characteristic was associated with offending. Children residing with unmarried primary caregivers are significantly more likely to report engaging in offending than those residing with primary caregivers that are married (OR = .630; p > . 05).

Table 5 shows results from four separate logistic regression models predicting wave 2 offending prevalence. Specifically, these models assess if our theoretically derived measures of delinquent peers, self-control, and parenting variables mediate the association between generational status and offending prevalence. Model 1 in Table 5 shows that the inclusion of delinquent peers does not mediate the statistically significant association between generational status and offending, both second (OR = 1.739; p < .05) and third-generation Hispanic children and adolescents (OR = 3.315; p < .05) are still significantly more likely to report engaging in offending than their first-generation counterparts. Delinquent peers does have a positive and statistically significant influence on offending, indicating that Hispanic children and adolescents with larger portions of delinquent peers are more likely to report engaging in offending (odds = 1.616; p < .05). As observed in the violent victimization models, males and older subjects are also significantly more likely to report engaging in offending at wave 2 than females and younger subjects.

## Table 5. Logistic Regression Predicting Past 12 Months Self-Reported

#### Offending Prevalence: Assessing Mediating Influences (n = 763).

	Model 1	Model 2	Model 3	Model 4
	Delinquent Peers	Self-Control	Parenting	Full Model
	OR RSE	OR RSE	OR RSE	OR RSE
Generational Status				
2 <sup>nd</sup> Generation	1.739* .413	1.889* .439	1. <b>942*</b> .453	1.716* .422
3 <sup>rd</sup> Generation	3.315* 1.304	3.032* 1.222	3.563* 1.491	3.017* 1.293
Language Acculturation	1 . <b>929 .069</b>	.958 .072	.969 .071	.950 .071
Sex	1.804* .277	1.860* .272	1.943* .293	1.786* .273
Age	1.163 <b>*</b> .049	1.285* .044	1.278* .043	1.180* .052
PC Age	1.014 .016	1.022 .016	1.017 .015	1.019 .017
PC Married	.692 .160	.678 .158	.617* .144	.716 .173
PC Employed	1.123 .190	1.134 .188	1.083 .170	1.123 .188
Socioeconomic Status	1.135 .094	1.107 .090	1.145 .100	1.101 .095
Delinquent Peers	1.616* .160			1.599* .168
Low Self-Control		1.352* .092		1.289* .095
Parenting				
Warmth			1.136 .103	1.173 .111
Supervision			1.129 .090	1.231* .108
Hostility			.868 .085	.884 .088
Wald $\chi^2$	147.37*	113.29*	145.46*	167.70*
Pseudo R <sup>2</sup>	.1268	.1121	.1051	.1436

\* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = Primary Caregiver

Model 2 in Table 5 shows that the inclusion of low self-control does not mediate the significant association between generational status and offending, both second (OR = 1.889; p < .05) and third-generation Hispanic children and adolescents (OR = 3.032; p < .05) are still significantly more likely to report engaging in criminal offending than their first-generation counter parts. Low self-control does have a positive and statistically significant influence on offending, indicating that Hispanic children and adolescents possessing lower self-control are more likely to report engaging in criminal offending (OR = 1.352; p < .05) compared to those with more self-control. Again, males and older subjects are also more likely to report engaging in offending at wave 2.

Model 3 in Table 5 shows that the inclusion of parenting variables do not mediate the significant association between generational status and offending, both second (OR = 1.942; p < .05) and third-generation Hispanic children and adolescents (OR= 3.563; p < .05) are still significantly more likely to report engaging in criminal offending than their first-generation counterparts. Unlike peer delinquency and low self-control, none of the parenting variables have statistically significant influences on offending. Again, males and older subjects are also more likely to report engaging in offending at wave 2. Marriage re-emerges as having a negative and statistically significant influence on offending, indicating that children and adolescents residing with unmarried primary caregivers are significantly more likely to report criminal offending compared to those living with married primary caregivers (OR = .617; p < .05).

Model 4 in Table 5 is a full model that includes all theoretically derived variables (i.e., delinquent peers, self-control, and parenting variables) in predicting offending prevalence. As shown, these variables in combination are still unable to account for the statistically significant association between generational status and criminal offending. Second (OR = 1.716; p < .05)

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and third-generation Hispanic children and adolescents (OR = 3.017; p < .05) are still significantly more likely to report engaging in criminal offending than their first-generation counterparts. Both delinquent peers (OR = 1.599; p < .05) and low self-control (OR = 1.289; p < .05) maintain their positive and statistically significant influences on the likelihood of engaging in criminal offending. While in previous models parenting variables were not shown to be statistically important, our full model reveals that supervision has a positive and statistically significant influence on offending prevalence (OR = 1.231; p < .05). This suggests that Hispanic children and adolescents are more likely to report engaging in criminal offending when their primary caregivers provide more supervision. Again, males and older subjects are also more likely to report engaging in offending at wave 2.

#### **Predicting the Prevalence of Property Offending**

Table 6 shows results from a logistic regression analysis predicting wave 2 property offending prevalence that adjusts for the fact that Hispanic children and adolescents reside in a variety of neighborhood clusters in Chicago. As described in the methods section, property offending prevalence at wave 2 distinguishes between Hispanic children and adolescents that reported engaging in at least one of the property offenses they were asked about within the 12 months prior to being interviewed. This model assesses the baseline influences of generational status and language acculturation net of various child and adolescent demographic characteristics and characteristics of their primary caregivers. In contrast to the offending prevalence models, generational status is not significantly associated with property offending; no statistical differences in property offending emerge between second and first-generations or third and firstgenerations. Again, linguistic assimilation does not have a statistically significant influence on property offending. As anticipated by prior research and similar to all reported models thus

Males were more likely than females to report property offending (OR = 1.468; p < .05), and

older subjects were more likely than their younger counterparts to report involvement in property

offending (OR = 1.130; p < .05).

Prevalence during the Past 12 Months $(n = 763)$ .				
	Odd Ratio	RSE		
Generational Status				
2 <sup>nd</sup> Generation	1.141	.241		
3 <sup>rd</sup> Generation	1.315	.641		
Language Acculturation	1.058	.121		
Sex	1.468*	.263		
Age	1.130*	.039		
PC Age	1.018	.015		
PC Married	.881	.1 <b>94</b>		
PC Employed	1.023	.210		
Socioeconomic Status	1.1 <b>27</b>	.100		
Wald $\chi^2 = 45.77^*$				
Pseudo $R^2 = .0299$				

Table 6. Logistic Regression Predicting Wave 2 Self-Reported Property Offendin
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\* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = Primary Caregiver

# Table 7. Logistic Regression Predicting Wave 2 Self-Reported Property Offending

(n = 763).				
	Model 1	Model 2	Model 3	Model 4
	Delinquent Peers	Self-Control	Parenting	Full Model
	OR RSE	OR RSE	OR RSE	OR RSE
Generational Status				
2 <sup>nd</sup> Generation	1.026 .214	1.118 .236	1.143 .242	1.017 .215
3 <sup>rd</sup> Generation	1.259 .626	1.220 .602	1.319 .660	1.224 .636
Language Acculturation	1.030 .118	1.059 .123	1.061 .121	1.039 .118
Sex	1.380 .250	1.441* .253	1.470* .265	1.337 .241
Age	1.036 .042	1.133* .039	1.128* .039	1.039 .043
PC Age	1.016 .017	1.021 .016	1.108 .015	1.018 .017
PC Married	.983 .236	.920 .205	.879 .195	.998 .238
PC Employed	1.038 .219	1.033 .214	1.014 .206	1.037 .222
Socioeconomic Status	1.123 .099	1.110 .097	1.132 .104	1.112 .102
Delinquent Peers	1.509* .165			1.496* .184
Low Self-Control		1.168 .097		1.091 .105
Parenting				
Warmth			1.012 .098	1.029 .102
Supervision			1.015 .087	1.074 .108
Hostility			.941 .087	.951 .090
Wald $\chi^2$	55.61*	45.15*	49.33*	58.05*
Pseudo R <sup>2</sup>	.0522	.0335	.0305	.0541

Prevalence during the Past 12 Months: Assessing Mediating Influences

\* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = Primary Caregiver

Table 7 shows results from four separate logistic regression models predicting wave 2 property offending prevalence. These models assess whether theoretically derived measures of delinquent peers, self-control, and parenting variables predict property offending. In sum, models 1 through 4 reveal several noteworthy findings. First, in model 1 and consistent with past models, delinquent peers has a positive and statistically significant influence on property offending (OR = 1.509; p < .05), indicating that Hispanic children and adolescents who associate with increasingly more delinquent peers are more likely to report engaging in property crime at wave 2 than their counterparts who associate with fewer delinquent peers. Second, also in model 1, the significant influences of sex and age on property offending were accounted for by delinquent peers. Third, in model 2, low self-control does not have a statistically significant influence on property offending, and sex (OR = 1.441; p < .05) and age (OR = 1.133; p < .05) reemerge as having positive and statistically significant influences. Fourth, in model 3, none of the parenting variables emerge as statistically significant predictors of property offending, but sex (OR = 1.470; p < .05) and age (OR = 1.128; p < .05) remain significantly associated with property offending. Finally, in model 4, which is the fully specified model, only delinquent peers has a statistically significant influence on property offending (OR = 1.496; p < .05).

#### **Predicting the Prevalence of Violent Offending**

Table 8 shows results from a logistic regression analysis predicting wave 2 violent offending prevalence that adjusts for the fact that Hispanic children and adolescents reside in a variety of neighborhood clusters in Chicago. It is a baseline model to investigate the influences of generational status and language acculturation on violent offending net of various child and adolescent demographic characteristics and characteristics of their primary caregivers. As described in the methods section, violent offending prevalence at wave 2 distinguishes between Hispanic children and adolescents that reported engaging in at least one violent offense in the 12 months prior to being interviewed. First, generational status has a positive and statistically significant influence on self-reported violent offending. Second-generation Hispanic immigrants are more likely than their first-generation counterparts to report engaging in violent offending at wave 2 (OR = 2.269; p < .05). Additionally, third-generation immigrants were significantly more likely to report violent offending compared to first-generation immigrants (OR = 4.884; p < .05). It is also important to note that the likelihood of violent offending increases from second to thirdgeneration when both are compared to first-generation. Second, our measure of language acculturation is not significantly associated with violent offending. Third, and as anticipated by prior research, both sex and age have positive and statistically significant influences on selfreported violent offending. Males are significantly more likely than females to report engaging in violent offending (OR = 2.215; p < .05). Older subjects are significantly more likely than their younger counterparts to report engaging in violent offending (OR = 1.303; p < .05). One primary caregiver characteristic is associated with violent offending; children and adolescents residing with unmarried primary caregivers are significantly more likely to report engaging in violent offending than those residing with married primary caregivers (OR = .580; p > .05). Further, socioeconomic status (SES) is positively and significantly associated with violent offending (is = 1.233; p < .05), indicating that children and adolescents residing in families having higher SES are more likely to report offending.

#### Table 8. Logistic Regression Predicting Wave 2 Self-Reported Violent Offending

	,,.	
	Odd Ratio	RSE
Generational Status		
2 <sup>nd</sup> Generation	2.269*	.688
3 <sup>rd</sup> Generation	4.884*	2.499
Language Acculturation	. <del>9</del> 48	.075
Sex	2.215*	.389
Age	1.303*	.04 <del>6</del>
PC Age	1.009	.016
PC Married	.580*	.148
PC Employed	1.1 <b>07</b>	.214
Socioeconomic Status	1.233*	.1 <b>06</b>
Wald $\chi^2 = 101.01^*$		
Pseudo $R^2 = .1228$		

Prevalence (n = 763).

# \* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = Primary Caregiver

Table 9 shows results from four separate logistic regression models predicting wave 2 violent offending prevalence. Specifically, these models assess if our theoretically derived measures of delinquent peers, self-control, and parenting variables can account for the association between generational status and violent offending prevalence. Model 1 in Table 8 shows that the inclusion of delinquent peers does not account for the significant association between generational status and offending, both second (OR = 2.315; p < .05) and third-generation Hispanic children and adolescents (OR = 4.639; p < .05) are still significantly more likely to report engaging in violent offending compared to their first-generation counterparts.

Nonetheless, delinquent peers does have a positive and statistically significant influence on offending, indicating that Hispanic children with a larger portion of delinquent peers are more likely to report engaging in violent offending (OR = 1.691; p < .05). SES has a positive and significant association with violent offending (OR = 1.232; p < .05). Again, males and older subjects are also significantly more likely to report engaging in violent offending at wave 2.

Model 2 in Table 9 shows that the inclusion of low self-control can not account for the significant association between generational status and violent offending, both second (OR = 2.566; p < .05) and third-generation Hispanic children and adolescents (OR = 4.251; p < .05) are still significantly more likely to report engaging in violent offending than their first-generation counter parts. Low self-control does have a positive and statistically significant influence on violent offending, indicating that Hispanic children that have lower self-control are more likely to report engaging in violent offending (OR = 1.420; p < .05) compared to those with more self-control. SES remains as a positive and statistically significant influence on violent offending (OR = 1.190; p < .05). Again, males and older subjects are also more likely to report engaging in offending at wave 2.

Model 3 in Table 9 shows that the inclusion of parenting variables do not mediate the significant association between generational status and offending, both second- (OR = 2.652p < .05) and third-generation Hispanic children and adolescents (OR = 5.076; p < .05) are still significantly more likely to report engaging in violent offending than their first-generation counterparts. Unlike peer delinquency and low self-control, none of the parenting variables had

## Table 9. Logistic Regression Predicting Wave 2 Self-Reported Violent Offending

	Model 1	Model 2	Model 3	Model 4
	Delinquent Peers	Self-Control	Parenting	Full Model
	OR RSE	OR RSE	OR RSE	OR RSE
Generational Status				
2 <sup>nd</sup> Generation	2.315* .611	2.566* .662	2.652* .725	2.307* .635
3 <sup>rd</sup> Generation	4.639* 2.415	4.251* 2.212	5.076* 2.731	4.319* 2.336
Language Acculturation	.916 .070	. <del>9</del> 48 .074	.961 .076	.940 .070
Sex	2.081* .379	2.169* .379	2.247* .391	2.082* .371
Age	1.1 <b>73*</b> .051	1.316* .047	1. <b>309*</b> .046	1.196* .052
PC Age	1.005 .016	1.015 .016	1.010 .016	1.012 .017
PC Married	.652 .168	.636 .164	.565* .148	.678 .183
PC Employed	1.126 .225	1.148 .227	1.094 .206	1.158 .281
Socioeconomic Status	1.232* .107	1.190* .099	1.232* . 111	1.178 .106
Delinquent Peers	1.691* .165			1.674* .166
Low Self-Control		1.420* .121		1.355* .117
Parenting				
Warmth			1.140 .124	1.188 .131
Supervision			1.179 .104	1.326* .130
Hostility			.895 .110	.914 .115
Wald $\chi^2$	1 <b>46.37*</b>	1 <b>20.9</b> 1*	1 <b>34.49</b> *	175.75*
Pseudo R <sup>2</sup>	.1556	.1398	.1291	.1 <b>768</b>

# Prevalence: Assessing Mediating Influences (n = 763).

\* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = Primary Caregiver

significant influences on offending. Again, males and older subjects are also more likely to report engaging in offending at wave 2. Marriage re-emerges as having a negative and statistically significant influence on violent offending (OR = .565; p > .05), indicating that children and adolescents residing with unmarried primary caregivers are significantly more likely to report violent offending compared to those living with married primary caregivers. SES remains as having positive and statistically significant influence on violent offending (OR = 1.232; p < .05).

Model 4 in Table 9 is a full model that includes all theoretically derived variables (i.e., delinquent peers, self-control, and parenting variables) in predicting violent offending prevalence at Wave 2. As shown, these variables in combination are still unable to account for the statistically significant association between generational status and criminal offending. Second (OR = 2.307; p < .05) and third-generation Hispanic children and adolescents (OR = 4.319; p < .05) are still significantly more likely to report engaging in violent offending than their first-generation counter parts. Both delinquent peers (OR = 1.674; p < .05) and low self-control (OR = 1.355; p < .05) maintained their positive and statistically significant influences on the likelihood of engaging in violent offending. While in previous models parenting variables were not shown to be statistically important, our full model reveals that supervision has a positive and statistically significant influence on offending prevalence (OR = 1.326; p < .05). Interestingly, this suggests that Hispanic children and adolescents are more likely to report engaging in violent offending when their primary caregivers provide more supervision. Again, males and older subjects are also more likely to report engaging in offending at wave 2.

#### Predicting the Frequency of Criminal Offending

Prior to estimating models to assess the influences of acculturation and neighborhood factors on the frequency of criminal offending, unconditional overdispersed poisson HGLM models were estimated to determine whether the frequency of offending, including types of offending (i.e., property and violent), among Hispanic children and adolescents vary across neighborhood clusters. While results indicate that overall self-report offending and property offending frequency did not significantly vary by neighborhood clusters, the frequency of violent offending did. We first report findings from negative binomial regression models predicting selfreported overall offending and property offending frequency, while adjusting for the fact that subjects living in various neighborhood clusters in Chicago. Next, we report findings from a multilevel overdispersed poisson HGLM that assesses the influence of neighborhood and individual characteristics on self-reported frequency of violent offending.

Table 10 shows results from a negative binomial regression model predicting wave 2 offending frequency that adjusts for the fact that Hispanic children and adolescents reside in a variety of neighborhood clusters in Chicago. As described in the methods section, total offending frequency at wave 2 is a summated count of the number of self-reported offenses (property, violent, and drug offenses) committed by Hispanic children and adolescents in the 12 months prior to being interviewed. This model assesses the baseline influences of generational status and language acculturation net of various child and adolescent demographic characteristics and characteristics of their primary caregivers. First, generational status has a positive and statistically significant association with self-reported offending frequency. Second-generation Hispanic immigrants reported offending more frequently than their first-generation counterparts

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(b = .697; p < .05). Second, language acculturation is significantly associated with offending frequency, indicating that Hispanic children and adolescents who are more acculturated with respect to language offended more frequently compared to those less acculturated. Third, age has a positive and statistically significant association with offending frequency. Older subjects are more likely than their younger counterparts to report a higher offending frequency (b = .266; p < .05). Finally, SES has a positive and statistically significant association with offending frequency (b = .266; p < .05). Finally, SES has a positive and statistically significant association with offending the theory offending frequency (b = .266; p < .05). Finally, SES has a positive and statistically significant association with offending the transformation of the second state of the second st

(n = 763).			
	b	RSE	
Generational Status			
2 <sup>nd</sup> Generation	.697*	.324	
3 <sup>rd</sup> Generation	.593	.721	
Language Acculturation	.365*	.160	
Sex	046	.262	
Age	.266*	.079	
PC Age	.050*	.022	
PC Married	.341	.322	
PC Employed	449	.343	
Socioeconomic Status	.319*	.119	
Wald $\chi^2 = 67.69$			

Table 10. Negative Binom	ial Regression Pred	dicting Wave 2 Self-F	Reported Offending	Frequency

**α=10.181**\*

\* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = Primary Caregiver;  $\alpha$  = alpha parameter

Table 11 shows results from four separate negative binomial regression models predicting wave 2 offending frequency. Specifically, these models assess if our theoretically derived measures of delinquent peers, self-control, and parenting variables mediate the associations between generational status, language acculturation, and offending frequency. Model 1 in Table 11 shows that the inclusion of delinquent peers does not mediate the statistically significant association between generational status and offending frequency. Secondgeneration Hispanic children and adolescents (b = .807; p < .05) report offending more frequently than their first-generation counter parts. The inclusion of delinquent peers, however, does appear to mediate the significant association between language acculturation and offending frequency. Delinquent peers has a positive and statistically significant influence on offending frequency, indicating that Hispanic children with a larger portion of delinquent peers report offending more frequently than those with fewer delinquent peers (b = .665; p < .05). SES maintains its positive and statistically significant association with offending frequency.

Model 2 in Table 11 shows that the inclusion of low self-control does not mediate the significant association between generational status and offending frequency; that is, second-generation Hispanic children and adolescents report more frequent offending (b = .863; p < .05) than their first-generation counterparts. Further, low self-control does not account for the statistically significant association between language acculturation and offending frequency. Low self-control does have a positive and statistically significant influence on offending frequency, indicating that Hispanic children and adolescents possessing lower self-control report offending more frequently (b = .463; p < .05) than those possessing more self-control. SES, age, and age of primary caregiver all have positive and statistically significant influences on offending frequency.

#### Table 11. Negative Binomial Regression Predicting Wave 2 Self-Reported Offending

	Model 1	Model 2	Model 3	Model 4
	Delinquent Pee	ers Self-Control	Parenting	Full Model
	b RSE	b RSE	b RSE	b RSE
Generational Status				
2 <sup>nd</sup> Generation	.807* .301	.863* .280	.706* .329	.808* .297
3 <sup>rd</sup> Generation	1.139 .708	.569 .648	.563 .619	.850 .598
Language Acculturation	.133 .140	.343* .159	.282 .149	.125 .145
Sex	203 .278	123 .263	030 .262	202 .256
Age	.117 .080	.241* .072	.265* .072	.115 .065
PC Age `	.027 .024	.054* .024	.039 .022	.023 .024
PC Married	.220 .290	.435 .303	.358 .285	.195 .266
PC Employed	478 .340	582 .350	414 .302	377 .306
Socioeconomic Status	.347* .128	.277* .130	.313* .115	.343* .126
Delinquent Peers	.665* .142			.637* .142
Low Self-Control		.463* .137		.255 .142
Parenting				
Warmth			322* .151	320* .152
Supervision			.138 .102	.045 .106
Hostility			121 .151	.114 .124
Wald $\chi^2$	111. <b>92*</b>	78.02*	85.07*	123.10*
α	9.261	9.782	9.887	8.852

Frequency: Assessing Mediating Influences (n = 763).

\* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = Primary Caregiver;  $\alpha$  = alpha parameter

Model 3 in Table 11 shows that the inclusion of parenting variables does not mediate the significant association between generational status and offending. Second (b = .706; p < .05) generation Hispanic children and adolescents report engaging in offending more frequently than their first generation counter parts. Further, it appears that parental warmth accounted for the association between language acculturation and offending frequency, rendering the association statistically insignificant. Of the parenting variables, parental warmth has a negative and statistically significant influence on offending frequency (b = -.322; p < .05), indicating that Hispanic children and adolescents with less parental warmth report offending more frequently than those whose primary caregivers provide more warmth. Again, males and older subjects are also more likely to report engaging in offending at wave 2. SES and age both have positive and statistically significant influences on offending frequency.

Model 4 in Table 11 is a full model that includes all theoretically derived variables (i.e., delinquent peers, self-control, and parenting variables) in predicting offending frequency. As shown, these variables in combination are still unable to account for the significant association between generational status and criminal offending, but they do account for the association between language acculturation and offending frequency. While both delinquent peers (b = .637; p < .05) and parental warmth (b = -.320; p < .05) maintain their significant influences, low self-control no longer has a statistical significant influence on offending frequency. Interestingly, this suggests that Hispanic children and adolescents are more likely to report engaging in criminal offending when their primary caregivers provide more supervision. Of the demographic characteristics, SES maintains its positive and statistically significant influence on offending frequency.

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# **Predicting the Frequency of Property Offending**

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Table 12 shows results from a negative binomial regression analysis predicting wave 2 property offending frequency that adjusts for the fact that Hispanic children and adolescents reside in a variety of neighborhood clusters in Chicago. As described in the methods section, property offending at wave 2 is a summated count of self-reported property offenses committed by Hispanic children and adolescents in the 12 months prior to being interviewed. This model assesses the baseline influences of generational status and language acculturation net

# Table 12. Negative Binomial Regression Predicting Wave 2 Self-Reported Property Offending

	b	RSE
Generational Status		
2 <sup>nd</sup> Generation	.330	.332
3 <sup>rd</sup> Generation	1.425	.935
Language Acculturation	.371*	.160
Sex	003	.327
Age	.224*	.090
PC Age	.086*	.028
PC Married	.900*	.339
PC Employed	262	.410
Socioeconomic Status	.035	.147

Wald  $\chi^2 = 67.81^*$ 

## α=15.919

\* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = Primary Caregiver;  $\alpha$  = alpha parameter

of various child and adolescent demographic characteristics and characteristics of their primary caregivers. Generational status is not significantly associated with property offending; no statistical differences in property offending frequency emerged between second and first-generations or third and first-generations. However, language acculturation has a statistically significant influence on property offending frequency (b = .371; p < .05), indicating that Hispanic youth who are more acculturated with respect to language also report a higher frequency of property offending compared to their less language acculturated counterparts. Age, primary caregiver's age, and marital status of primary caregivers all have positive and statistically significant influences on property offending frequency.

Table 13 shows results from four separate negative binomial regression models predicting wave 2 property offending frequency. These models assess whether theoretically derived measures of delinquent peers, low self-control, and parenting variables predict property offending frequency, and whether any of these variables account for the statistically significant association between language acculturation and property offending frequency. In sum, models 1 through 4 reveal several noteworthy findings. First, the statistically significant association between language acculturation and property offending frequency is accounted for by delinquent peers. Second, in model 1 and consistent with past models, delinquent peers has a positive and statistically significant influence on property offending frequency (b = .769; p < .05), indicating that Hispanic children and adolescents who report associating with more delinquent peers also report more frequently engaging in property offending compared to those with less delinquent peers. Third, in model 2, low self-control has a positive and statistically significant influence on the frequency of property offending (b = .393; p < .05), indicating that those possessing lower self-control also report engaging in more property offending in comparison to those that possess more self-control; however, low self-control does not account for the significant association between language acculturation and frequency of property offending. Further, model 2 shows that age, primary caregiver age, and marital status of primary caregiver have positive and statistically significant influences on the frequency of property offending. Fourth, model 3 shows that none of the parenting variables are significant predictors of property offending frequency and a statistically significant association between linguistic assimilation and the frequency of property offending remained (b = .366; p < .05). Finally, of the theoretically derived variables in our fully specified model 4, only delinquent peers has a statistically significant influence on property offending (b = .731; p < .05).

# Table 13. Negative Binomial Regression Predicting Wave 2 Self-Reported Property Offending

Frequency: Assessing Mediating Influences (n = 763).					
	Model 1	Model 2	Model 3	Model 4	
	Delinquent Peers	Self-Control	Parenting	Full Model	
	b RSE	b RSE	b RSE	b RSE	
Generational Status					
2 <sup>nd</sup> Generation	.056 .382	.341 .280	.262 .329	.031 .361	
3 <sup>rd</sup> Generation	.510 .945	1.1 <b>27</b> .648	1.011 .619	.925 .830	
Language Acculturation	.251 .176	.373* .159	.366* .149	.247 .174	
Sex	169 .337	131 .263	065 .262	405 .362	
Age	.029 .097	.214* .072	.229* .072	.055 .073	
PC Age	.079* .034	.088* .024	.082* .022	.071* .031	
PC Married	.516 .312	.812* .303	.940* .285	.468 .334	
PC Employed	170 .414	271 .350	321 .302	150 .373	
Socioeconomic Status	.001 .149	013 .130	.082 .115	.039 .143	
Delinquent Peers	.769* .198			.731* .195	
Low Self-Control		.393* .137		.264 .180	
Parenting					
Warmth			307 .151	274 .176	
Supervision			.112 .102	033 .123	
Hostility			058 .151	.120 .140	
Wald $\chi^2$	74.36*	64.62*	77.61*	92.60*	
α	14.478	15.469	15.534	13. <b>943</b>	

Frequency: Assessing Mediating Influences (n = 763).

\* p < .05; Note: OR = Odds Ratio; RSE = Robust Standard Error; PC = Primary Caregiver;  $\alpha$  = alpha parameter
#### **Predicting the Frequency of Violent Offending**

The frequency of violent offending among Hispanic children and adolescents is the only outcome that varied across neighborhoods. In an unconditional overdispersed poisson HGLM, self-reported frequency of violent offending has a variance component of .555 (p < .05). Significant variation in the frequency of violence across neighborhoods could not be explained by characteristics of Hispanic youth or their primary caregivers. Furthermore, neighborhood variables (e.g., concentrated disadvantage, immigrant concentration, etc.) did not have statistically significant influences on violence and were unable to explain why the frequency of violence varied significantly across neighborhoods. However, several individual characteristics of Hispanic youth have statistically significant influences of self-reported violence frequency. Generational status and language acculturation are not significantly associated with self-reported frequency of violence. After controlling for neighborhood-level variables, peer delinquency has a positive and statistically significant influence indicating that Hispanic children and adolescents with reporting more delinquent peers report engaging in significantly more violence than those with less delinquent peers (b = .350; p < .05). Sex (b = .631; p < .05) and age (b = .168; p < .05) also had positive and statistically significant influences on violence frequency. Socioeconomic status has a positive and statistically significant influence on self-reported violence frequency. Finally, while low self-control initially had a positive and statistically significant influence on the frequency of violence, its significant influence dissipates when delinquent peers is controlled (in analyses not reported in table 14).

# Table 14. Overdispersed Poisson Hierarchical Generalized Linear Model Predicting Wave 2

	Model 1	Model 2
Fixed Effect		
Neighborhood-Level		
Neighborhood Structure		
Concentrated Disadvantage 1990		028 (.101)
Immigrant Concentration 1990		.043 (.086)
Child-Based Collective Efficacy		
Intergenerational Closure		036 (1.068)
Reciprocated Exchange		519 (1.027)
Child-Centered Social Control		1.158 (.709)
Individual-Level		
Generational Status		
2 <sup>nd</sup> generation	.480 (.320)	.477 (.318)
3 <sup>rd</sup> generation	015 (.670)	.015 (.663)
Language Acculturation	184 (.125)	200 (.125)
Sex	.626* (.236)	.631* (.235)
Age	.173* (.062)	.168* (.061)
PC Age	.026 (.019)	.026 (.019)
PC Married	187 (.250)	220 (.249)
PC Employed	073 (.259)	064 (.259)
Socioeconomic Status	.228* (.022)	.206* (.101)
Delinquent Peers	.348* (.104)	.350* (.103)
Low Self-Control	.191 (.092)	.180 (.113)
Parenting		
Warmth	.036 (.111)	.028 (.111)
Supervision	.219 (.135)	.227 (.133)
Hostility	006 (.121)	026 (.120)

\*p < .05; standard errors are in parentheses (n = 763 children; n = 59 neighborhoods)

#### V. CONCLUSIONS & DISCUSSION

The purpose of this study was to provide an understanding of the neighborhood and individual-level correlates of Hispanic children and adolescent's violent victimization and involvement in criminal offending. A specific objective was to understand if acculturation and assimilation among Hispanic immigrant children and adolescents are associated with these two types of outcomes, and if so, could variables derived from major criminological theories, social learning and self-control theory, help explain the associations. Another specific objective of the current study was to understand if Hispanic children and adolescents violent victimization experiences and criminal offending varied depending on neighborhood context, and if so what neighborhood structural and social processes might help understand why.

Findings from the current study are, with some exceptions, divergent from recent research linking neighborhoods to adolescent outcomes, but they are largely consistent with individual-level research on the theoretical underpinnings of victimization and criminal behavior. The totality of our findings offer negative evidence for neighborhood influences on offending and victimization; however, given the paucity of Hispanic research within criminology, we contend that the lack of variation at the neighborhood-level is as important as if it had been observed. On the other hand, in many instances our findings buttress the considerable literature linking individual differences in crime and victimization to individual characteristics such as low self-control and delinquent peers (Pratt & Cullen, 2000). Furthermore, our findings are consistent with the many studies reviewed earlier that have shown generational status is an important predictor of negative outcomes for adolescents (e.g., Morenoff & Astor, 2006). We briefly summarize our main findings below.

#### Summary of Neighborhood Influences on Victimization and Offending

Driven heavily by segmented assimilation theory, we argued that victimization and offending of Hispanic youth would vary depending on the type of neighborhood context they assimilate into. Our study found very little support for this notion. Specifically, in the initial stages of conducting our multi-level analysis we found that most victimization and offending outcomes did not significantly vary across Chicago neighborhoods; therefore, multi-level models were largely not used. The inability to use multi-level models in our research was driven by this first step in the modeling process where we conducted unconditional random intercept models for all outcomes to find that only one offending outcome among Hispanic children and adolescents significantly varied by neighborhood. Violent victimization of Hispanic children and adolescents did not significantly vary across neighborhoods, nor did our three measures of offending prevalence and frequency, with one exception. The frequency of violent offending was the only outcome found to significantly vary across neighborhoods; however, the neighborhood structural (concentrated disadvantage and immigrant concentration) and social factors (child based collective efficacy) that we considered in the current study could not explain why. In fact, no neighborhood-level characteristic that was hypothesized to influence offending across neighborhoods had influences on the frequency of violent offending. As discussed later in this section, our lack of neighborhood effects should not be interpreted as if neighborhoods are unimportant. It is possible that neighborhoods matter in several important ways that will take future research efforts to unpack. For instance, it could be that instead of neighborhoods having a direct influence on victimization and offending outcomes for Hispanic children and

adolescents, they may only exert influences on those who possess certain risk factors. Perhaps impoverished neighborhoods, and social conditions often associated with them, may matter more for only those who hangout with delinquent peers, have problems with self-regulation, and parents that practice poor parenting practices. On the other hand, neighborhoods may have protective effects for children who possess particular characteristics and not for others. These kinds of ideas need to be explored much further without dismissing the notion that neighborhood context matters when considering Hispanic adolescents, their families, and their involvement in offending and victimization.

#### Summary of Assimilation and Acculturation Influences on Victimization and Offending

With respect to acculturation and assimilation, we found evidence to support the notion that more assimilated and acculturated Hispanic children and adolescent immigrants are at an increased risk for being violently victimized and offending. Generational status was somewhat of a robust and consistent predictor of violent victimization, offending prevalence, and offending frequency. Second-generation Hispanics were more likely than first-generation to report being violently victimized. Second and third generation Hispanics were more likely to report offending and more likely to report involvement in violent offending, but not property offending. With respect to offending frequency, second generation Hispanics reported offending more frequently than first generation and the generational influence was also observed for frequency of violent offending; however, no association existed between generational status and property offending. We did not observe a robust and consistent association between language acculturation and most of our outcomes, including victimization and offending prevalence. However, language acculturation was associated with frequency of offending, including overall offending, property offending and violent offending. As described next, the reasons why

assimilation and acculturation are associated with victimization and offending are not fully known from this study.

# Summary of Theoretically Derived Individual-Level Variables on Victimization and Offending

The current study built on previous research that assesses whether assimilation and acculturation measures are associated with negative outcomes by incorporating potential mechanisms that could explain these links. While several of our theoretically derived measures had influences on violent victimization and offending among Hispanic youth, there were few instances when these variables mediated or accounted for the associations between acculturation and violent victimization and criminal offending. Specifically, delinquent peers was able to explain the association between generational status and violent victimization; that is, when delinquent peers was controlled the association between generational status and violent victimization between generational status and violent victimization. Furthermore, the association between language acculturation and the frequency of general offending and property offending was also explained by association with delinquent peers. On the other hand, none of the theoretically derived variables mediated the strong associations between generational status and overall offending and violent offending prevalence.

As mentioned prior, several of our theoretically derived variables influenced Hispanic youth's victimization and offending. First, increased associations with delinquent peers also increased the likelihood of being a violent victim, and the chances of overall offending, property offending, and violent offending. Further, Hispanic youth who associated with increasingly more delinquent peers were not only more likely to report offending, but were also likely to

offend more frequently. Second, while not as robust and consistent, self-control was also associated with several outcomes. For instance, Hispanic children possessing lower self-control were more likely to report engaging in offending, generally, and also more likely to report engaging in violent offending. However, low self-control was less important for predicting offending frequency. Finally, our parenting variables were rarely predictive of outcomes. In fact, none of our parenting variables significantly predicted violent victimization. Parental warmth had an influence on offending frequency, indicating that Hispanic youth whose primary caregivers showed less warmth reported a higher offending frequency.

#### **Implications for Policy and Practice**

Census figures indicate there are now more than 43 million Hispanics residing within the United States, constituting approximately 15% of the total population (U.S. Census, 2005; see also Choi, Sakamoto, & Powers, 2008; Iceland & Nelson, 2008). Of these, 34.3% are below the age of 18. These numbers have serious implications for a number of social and political realities, not the least important of which are crime, delinquency, and victimization. These outcomes are of particular relevance to this youthful demographic in terms of proportion of the population in the primary age group for both offending and victimization. Larger numbers of young people, if nothing else, create a larger pool of potential offenders and victims.

A large number of these Hispanics are second and third-generation immigrants and therefore subject to the acculturative stressors and cultural conflicts documented within these groups (Coatsworth, Maldonado-Molina, Pantin, & Szapocznik, 2005; Montgomery, 1992a, 1992b; de la Rosa, 2002; Warner et al., 2006). The findings presented in the current study indicate that second and third-generation Hispanic adolescents are at a far greater risk for crime and victimization as compared to their first-generation counterparts. The acculturation process

appears, then, to engender negative behavior and experiences, net of other germane variables, which is consistent with the segmented assimilation perspective.

Given the influx to the United States of people from Mexico and other Latin American countries (U.S. Census, 2005) with dissimilar beliefs and parenting practices, it is essential to understand the social context of their lives and determine which institutions (family, education, church, etc.) hold the most importance for them. This knowledge is necessary to implement culturally-appropriate crime prevention strategies at both the individual and neighborhood levels. Despite high levels of poverty and low levels of educational attainment, the Hispanic population does not conform to the urban underclass model that has formed the basis of policies addressing the needs of poor and minority populations (Hayes-Bautista et al., 1992). Therefore, the development of a new empirical knowledge base is vital in formulating and implementing sensible policies that consider the changing face and culture of the urban poor.

Studying subjects cross-culturally can also provide health professionals, counselors, and educators with the tools necessary to recognize behaviors and other warning signs indicative of future delinquency or crime among specific ethnic groups. Offering a better understanding of acculturation, neighborhoods, and individual factors and how these interact allows professionals in the criminal justice system and clinicians to intervene by targeting multi-level risk factors of serious delinquency and offending, as well as help prevent victimization of ethnic adolescents. Promoting education and awareness of the diversity of issues for families and individuals with varying backgrounds can assist in the creation of culturally-sensitive early prevention and intervention programs which ultimately may result in lower levels of crime and victimization within these communities.

Attention to cultural issues has also been championed by the field of medicine and can have considerable implications for the health of ethnic minority populations (Soriano, Rivera, Williams, Daley, & Reznik, 2004). Because acculturation is associated both with youth violence (Soriano et al., 2004) and health problems more generally (Aldrich & Variyam, 2000; Buriel, et al., 1982; Burnam, et al., 1987; Caetano, 1987; Chappin & Brook, 2001; Kaplan & Marks, 1990), its impact reaches far beyond the criminal justice and social service realms. The high rate of youth violence among Hispanics in particular constitutes a public health crisis within these communities (Rodriguez & Brindis, 1995) and attention to the risk factors associated with the phenomenon is critical to effective prevention and intervention.

The findings from this study offer several additional noteworthy policy implications. Because first-generation immigrants in this study were less likely than second and third to engage in, or be victimized by crime, it is reasonable to begin with consideration of the factors on which these groups differ. Certainly, it appears that there exist considerable protective factors that accompany the experiences of these most recently arrived immigrants. A natural point of departure for this discussion is the cultural values and norms that are of most importance for Hispanic immigrants.

Though Hispanics are comprised of a number of different groups which hail from countries across Latin America and the Caribbean there are several cultural values that are shared. First, allocentrism, or collectivism, has been proposed as a basic Hispanic value by a number of researchers (see, for example, Hofstede, 1980 and Marin & Marin, 1991). Collectivist cultures emphasize the needs, objectives, and points of view of the in-group (often at the expense of the individual) and are thus considered more interdependent and willing to conform to the wishes of the in-group. These tendencies can be capitalized upon by intervention and prevention

programs aimed at disrupting or deterring problem behavior. More specifically, intervention and prevention programs aimed at Hispanic populations will have more success when they are able to utilize the family and ethnic community in designing and implementing the program.

Another important Hispanic value that lends itself to the development of successful delinquency prevention and intervention programs is that of familialism. Familialism is a cultural value that involves individuals' strong identification with and attachment to their nuclear and extended families and strong feelings of loyalty, reciprocity, and solidarity among family members (Marin & Marin, 1991). Familialism has been shown to include three types of value orientations including the perceived obligation to provide support to the family, a reliance on family members for support, and the perception of family members as behavioral and attitudinal referents (Sabogal et al., 1987). Thus, like allocentrism, familialism can be utilized when developing and executing programmatic activities aimed at Hispanic adolescents. Engendering conformity among delinquent Hispanic adolescents, then, may be relatively more successful than attempting to change the behavior of other types of delinquents.

There is some empirical evidence that suggests using culturally focused approaches to prevent problem behaviors among minority adolescents, such as alcohol and drug use, can be more effective than generic methods (see, Botvin, Schinke, Epstein, Diaz, & Botvin, 1995; Coatsworth, Pantin, & Szapocznik, 2002). For example, Szapocznik and his colleagues developed *Familias Unidas*, a multi-level, family-centered intervention designed to prevent problem behavior in Hispanic adolescents (Coatsworth et al., 2002). This intervention is based on the eco-developmental framework that conceptualizes the etiology of adolescent problem behavior according to the multiple social contexts influencing development – family, schools, and peers. The principal intervention targets of the program include parental investment, self-

regulation and control, social competence, academic achievement, and social bonding (Coatsworth et al., 2002, pp. 120-122), several of which were identified in this study as salient predictors of both offending and victimization. This approach also places on emphasis on the acculturative conflicts that can occur between first-generation parents and their secondgeneration children and lead to the development of problem behavior among these adolescents. The results reported here are consistent with the divergent realities of first and second-generation immigrants and thus lend credibility to the applicability of interventions such as the Familias Unidas approach.

The findings generated from this research indicate that the children and grandchildren of immigrants are far more likely to be either the victim or perpetrator of violence as compared to those adolescents who immigrated to the U.S. as children. Furthermore, though not directly tested in this analysis, previous research has suggested that a significant predictor of adolescent problem behavior among ethnic minorities is actually parent-child acculturation conflict and not acculturation per se. Acculturation conflicts occur when messages from the culture of origin and host cultures become difficult to reconcile and can stem from acculturation gaps between parents and children with respect to involvement in the culture of origin and the host culture (see Smokowski, Rose, & Bacallao, 2008). This may be of significance to this analysis in that for some outcomes (e.g., victimization) differences were observed between first and secondgeneration subjects but not between first and third. It is theoretically plausible that there may be greater conflict between the children of immigrants and their parents than the conflict experienced between parents and children who were both born in the United States. Cognizance of this fact by those who work with ethnic minority adolescents and their families can assist in delivering appropriate and successful interventions.

Empirical research has shown that those Hispanic adolescents who successfully navigate between two cultural worlds do so in an adaptation pattern referred to as *biculturalism* (Coatsworth et al., 2005; Phinney, Cantu, & Kurtz, 1997; Smokowski et al., 2008). In response to the stresses and strains associated with the acculturation process, some adolescents are able to manage and reconcile the conflicting messages received from the various cultural forces to which they are exposed. Successful prevention and intervention programs such as those discussed above aim to develop biculturalism and increased sense of ethnic identity among atrisk youth and their families toward the goal of reduced family conflicts and problem behavior.

Overall, the findings presented from this analysis can inform a number of policy areas with respect to Hispanic adolescents and their families. First, the results reported here are largely consistent with the extant literature related to the role of generational status among Hispanics. This study confirms that problem behavior is more common among second and thirdgeneration Hispanic immigrants as compared to their first-generation counterparts. It is possible that these findings are attributable, in part, to the acculturative stressors common within immigrant families with adolescent children. Thus, it appears that second and third-generation immigrants are at a greater risk for problem behavior. Though this fact is fairly well-established among those who work with immigrant populations, it should be communicated to any audience with the potential to have contact with these groups, such as criminal justice agencies and schools.

Second, while this study produced findings consistent with what is known about Hispanics with respect to generational status, the results offered negative evidence for the saliency of neighborhoods in the etiology of Hispanic crime and delinquency. These findings, while in contrast to the larger extant literature regarding the effects of neighborhoods on child

development, should, however, be interpreted with caution. Though our outcomes did not vary significantly between neighborhoods for these subjects, other scholars who have utilized the full sample of the PHDCN have found such variability (see, for example, Morenoff & Astor, 2006). Thus, while the immediate reaction may be to focus all policy efforts at the individual-level based on such null findings, we caution the development of policy and programs that completely discount the effects of neighborhoods. What can be said based on these specific findings (which may not be generalizable to other cities or other types of Hispanics), is that there certainly appears to be problems associated with the acculturation process such that generational status exerts a negative effect on behavioral outcomes.

#### **Study Limitations**

While we believe our study on Hispanic children and adolescents has made advances beyond other studies that have explored the link between acculturation/assimilation and victimization and crime, but ours is not without limitations. First, we were somewhat surprised to observe that, for the most part, Hispanic children and adolescents' involvement in crime and victimization did not significantly vary across Chicago neighborhoods. While this could be true-that is, neighborhood differences are really not present-- our null findings may also be in part due to a limitation of how neighborhood was defined and measured in the current study.

A major ongoing debate in criminology centers on identifying the best and most precise geographical boundaries that represent the concept of neighborhood. We used neighborhood clusters to define our neighborhood contextual units, which are much larger than U.S. Census tracts; in fact, clusters often include two or three census tracts. This could have masked statistically significant variation in both violent victimization and offending behaviors that may have otherwise been observed in smaller neighborhood units (i.e., census tracts, block groups, or blocks). Because we do not have the ability to link individuals to smaller levels of aggregation such as blocks or even census tracts with the data provided to us this remains an empirical question. As such, our largely null findings regarding the link between neighborhoods, victimization and offending beg for further study.

Second, as pointed out by some researchers (Wikstrom & Sampson, 2003), variance or variation is only a descriptive measure and unable to discern a causal influence of neighborhood characteristics on Hispanic children and adolescents victimization and crime. Therefore, whether variation in victimization and crime existed or not across neighborhoods in the current study, a segmented assimilation argument, as it relates to neighborhood effects, cannot be dismissed. Understanding whether neighborhoods have causal influences on Hispanic youth and their families may require experiments in which families and their children are randomly assigned to relocate to various neighborhoods (Leventhal & Brooks-Gunn, 2003), and even these types of designs face problems (Sampson, 2009).

Third, neighborhoods are not the only context in which assimilation and acculturation occur for Hispanic youth. A neighborhood is one of several contexts (e.g., schools, church, etc) in which Hispanic youth may have opportunities to assimilate. This study was unable to consider other contexts that could prove to be important for advancing the segmented assimilation perspective.

#### **Directions for Future Research**

Though this project represents a significant extension of the extant literature base, especially given the strength of having both younger and older children in our sample, there also remains considerable room for future research in this area. First, the research questions explored

here may receive better clarification once more accurate measures of acculturation are utilized. While consistent with the bulk of research conducted on the process of acculturation which has also used generational status and language use as proxies for acculturation or assimilation, there are several other available multidimensional measures that may better assess individual acculturation status. These scales are typically preferable to single-item measures that are often viewed as little more than a crude proxy for assimilation. Furthermore, these multidimensional measures are preferable as they are able to capture the level of familiarism and comfort with both Hispanic and Anglo culture (i.e., biculturalism).

The nature of this research topic almost necessitates the use of longitudinal research designs and data. There are a number of areas in which longitudinal studies of immigrants and their children will expand and benefit the knowledge base. For example, longitudinal research can be utilized to explore the veracity of the key elements of the segmented assimilation perspective, including the major contention that economic prospects are bleak for recent immigration cohorts (Gans, 1992; Portes & Zhou, 1993). More specifically, longitudinal studies of macro-level economic conditions such as concentrated disadvantage and unemployment should be examined to test whether predictions of the 'hourglass economy' hold true for today's immigrants. Important questions remain as to the macro-level economic forces that may exert a long-term impact on intergenerational mobility. Other fruitful projects may explore the long-term impact of assimilation on immigrants' and their children's educational and economic outcomes.

Research on Hispanic crime and victimization should also be conducted using qualitative designs. For instance, comparisons between the sub-cultural features of inner-city African American adolescent life (i.e., Anderson, 1999) and those of disadvantaged Hispanic groups may

provide a more contextual view of the acculturation process for second and third generation immigrants. Qualitative designs would also allow for examination of the validity of the criminal immigrant subculture hypothesis which suggests that blocked opportunities may lead immigrants to turn to the illegitimate opportunity structure to achieve economic success. While researchers have claimed that organized ethnic gangs provide increased opportunities for immigrants to engage in crime (typically property and drug crime), there exists no recent ethnographic accounts of this phenomenon. Another related area of research may be to explore if this varies by city as there is good reason to believe this may be the case.

Few existing studies specify the nations from where immigrants hail which can obscure differences between these groups. Indeed, the study of immigration and crime has largely been stunted by a lack of delineation between immigrant groups and the assumption that even among groups of immigrants (e.g., Asian, Hispanic) there exists little variability. Future research will benefit from greater specification of the groups under study, including nation of origin.

The ethnic enclave also presents a promising area for future research. Though immigration sociologists have long studies these enclaves, there has been little research conducted related to the possible crime prevention effects of these communities. If ethnic enclaves are able to serve as a buffer to some of the deleterious aspects of the immigration experience, it is possible that they may also exert a positive effect on both macro and micro level crime related outcomes.

A multitude of research questions present themselves with respect to the acculturative stressors experienced by immigrants and their children. In particular, the ways in which acculturative stress may impact intergenerational discord remain a central focus of our own research agenda. It is reasonable to expect that the presence of intergenerational discord may

lead to deterioration in the amount and quality of informal social control exerted by the family. Though not an explicit focus of the current project, we suspect much of the involvement in crime and delinquency may be partially attributable to acculturative stressors and intergenerational discord.

Finally, we found that parental supervision increased involvement in offending, which runs counter to extant research that concludes more supervision and monitoring decreases the likelihood of involvement in crime and delinquency. Assuming our finding is not a methodological artifact, it may be important for future research to explore further why increased supervision is related to increased involvement in offending. Several avenues for further investigation may be warranted. First, high levels of supervision and monitoring for Hispanic youth, especially those becoming more acculturated, may lead to rebellion or even strain that can consequentially produce negative emotions and behaviors. Second, although beyond the scope of the PHDCN data, strong familial influences are somewhat characteristic of areas with Hispanic gangs. If supervision is part of such strong familial influences it could help explain the positive association with offending in our study.

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# **APPENDIX B: ITEMS FOR MEASURES**

# **Neighborhood Structural Variables**

# Concentrated Disadvantage

Percentage of neighborhood residents below the poverty line Percentage on public assistance Percentage of female-headed families Percentage unemployed Density of children by percentage younger than 18 Percentage African-American

#### Immigrant Concentration

Percentage of Latinos Percentage of foreign-born residents

# **Neighborhood Social Process Measures**

# Intergenerational Closure

Parents know their children's friends Adults know who local children are Children look up to adults in neighborhood Parents generally know each other Adults watch out for children

# Reciprocated Exchange

How often do people do favors for each other How often do you have parties How often do you watch others property How often do visit each others homes How often do you ask advice of neighbors

# Child-Centered Social Control

Neighbors do something about kids skipping school Neighbors do something about kids defacing building Neighbors scold child not showing respect

# **Self-Control Measure**

#### Inhibitory Control

Has trouble controlling his/her impulses Usually can not stand waiting Can tolerate frustration better than most (reverse code) Has trouble resisting temptation Finds self-control easy to learn (reverse code)

#### Decision Time

Often says the first thing that comes into his/her head Likes to plan things way ahead of time (reverse code) Often acts on the spur of the moment Always likes to make detailed plans before (s)he does something (reverse code)

#### Sensation Seeking

Generally seeks new and exciting experiences and sensations Will try anything once Sometimes does "crazy" things just to be different Tends to get bored easily

#### Persistence

Generally likes to see things through to the end (reverse code) Tends to give up easily Unfinished tasks really bother (reverse code) Once gets going on something (s)he hates to stop (reverse code)

# **Parenting Measures**

#### Parental Warmth Measure

Parent talks with child twice during visit Parent answers child's questions orally Parent encourages child to contribute Parent mentions skill of child Parent praises child twice during visit Parent uses diminutive for child's name Parent voices positive feelings to child Parent caresses, kisses, or hugs child Parent responds positively to praise of child

#### Lack of Hostility Measure

Parent does not shout at child during visit Parent does not express annoyance with child Parent does not slap or spank child Parent does not scold or criticize child

#### Supervision/Monitoring Measure

Subjects has a set time (curfew) to be home on school nights Subjects has a set time (curfew) to be home on weekend nights Has established rules about homework and checks to see if homework is done Requires subject to sleep at home on school nights When primary caregiver is not at home, reasonable procedures are established for subject to check in with primary caregiver or other designee on weekends or after school After school subject goes somewhere that adult supervision is provided Establishes rules for behavior with peers and asks questions to determine whether they are being followed Subject is not allowed to wander in public places without adult supervision for more than three hours Has had contact with two of the subject's friends in the last two weeks Has visited with school or talked to the teacher or counselor within the last three months Has discussed hazard of alcohol and drug abuse with subject in past year Denies subject access to alcohol (including beer and wine in the home) Know signs of drug use and remain alert to possible type or experimentation

# **Criminal Involvement Measures**

# Violent Offending

In the past 12 months have you:

Carried a weapon Purposely set fire to a house, car, or vacant building Snatched someone's purse or wallet Hit someone you live with Hit someone you did not live with Attack someone with a weapon Use a weapon or force to get money or thing from people Thrown object like rocks or bottles at people Shot someone Shot at someone Been in a gang fight Threatened to physically hurt someone

# Property Offending

In the past 12 months have you:

Purposely damaged or destroyed property belonging to you Entered or broken into a building to steal something Stolen something from a store Taken something that didn't belong to your from any member of your family Taken something from a car not belonging to you Stolen a car or motorcycle Used credit of bank card without permission

Drug Offending

In the past 12 months have you:

Sold Marijuana Sold crack Sold heroin

# **Delinquent Peers Measure**

In the past year, how many people you spend time with have done the following things:

Skipped school Gotten in trouble at school Gotten in trouble at home Lied, disobeyed, or talked back to adults Purposely damaged or destroyed property Stolen something worth \$5 or less Stolen Something worth \$5 but less than \$500 Stolen something worth more than \$500 Go into building and steal something Taken a motor vehicle, car or motorcycle for a ride or drive without the owners permission Gotten into a physical fight (fist) with schoolmates/coworker or friends Hit someone with the idea of hurting them Attacked someone with a weapon with the idea of seriously hurting them Have used a weapon or force to get money or thing from people Sold drugs, such as heroin cocaine, crack or LSD (other than marijuana) Used marijuana or pot Used any form of alcohol (including wine, liquor, or beer) Used drugs, such as heroin, cocaine, crack or LASD (other than marijuana) Used tobacco How many have had sexual intercourse

# APPENDIX C: DESCRIPTIVE STATISTICS BY AGE COHORT

# Descriptive Statistics for Victimization, Offending, and Generational Status by Age Cohort

# (n = 763).

	Cohort 9 $(n = 276)$		Cohort 12 $(n = 271)$		Cohort 15 (n = 216)	
	Mean	SD	Mean	ŚD	Mean	SD
Violent Victimization (wave 2) Prevalence	.120	.341	.240	.430	.310	.464
Offending Prevalence (wave 2)						
Offending	.109	.312	.399	.491	.389	.489
Violent Offending	.073	.260	.273	.446	.315	.466
Property Offending	.091	.288	.244	.430	.200	.400
Offending Frequency (wave 2)						
Offending	1.754	9.864	3.447	11.231	9.500	44.107
Property Offending	.746	6.276	1.646	6.304	3.760	28.367
Violent Offending	1.015	6.565	2.162	9.156	6.000	25.067
Generational Status						
1 <sup>st</sup> Generation	.200	.400	.260	.439	.280	.449
2 <sup>nd</sup> Generation	.750	.432	.680	.468	.660	.474
3 <sup>rd</sup> Generation	.050	.212	.060	.243	.060	.238