A Tale of Two Cities:
Residential Context and the Health-Risk Behaviors of Latino Adolescents in Los Angeles and Chicago

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Abstract

In the last two decades, immigrants, and particularly Latino immigrant groups such as Mexicans, have begun to fan out across the country, initiating new immigrant-receiving areas at the same time that older ones are being altered by increased immigrant suburbanization. These geographic shifts underscore the need for a more complete understanding of the role of social context in helping or hindering immigrants and their children. This analysis explores the possibility that residential location alters the adaptive trajectories of Latino youth in two different metropolitan areas. The data for this analysis come from the Los Angeles Family and Neighborhood Survey (LAFANS) and the Project on Human Development in Chicago Neighborhoods (PHDCN). We employ multivariate multilevel Rasch models to estimate the effects of individual, family, and neighborhood-level influences on two scales of adolescent health risk-behaviors (substance use and delinquency). We find that in Los Angeles, residence in communities with high levels of Latino co-ethnics is associated with higher odds of substance use and delinquency, particularly for U.S.-born Latinos. In Chicago, a different pattern appears whereby residence in communities with a high concentration of non-Latino Black residents increases the odds of substance use and delinquency for U.S.-born Latinos. We conclude that both sets of results illustrate the negative effects of segregation and concentrated disadvantage for Latino children of immigrants. The differences in the particular patterns (i.e. the negative effect of Latino concentration in Los Angeles versus the negative effect of non-Latino Black concentration in Chicago) reflect differences in the nature of segregation in both areas but not differences in the underlying process. The findings lend support to the contention put forth in the segmented assimilation literature that disadvantaged urban contexts increase the risk that U.S.-born children of immigrants experience downward assimilation.

Introduction

One of the most pronounced demographic trends revealed by the Census 2000 concerns the spatial dispersal of the Latino population within metropolitan areas and across the U.S. (Zúñiga and Hernández-León 2005). Sociological research on the assimilation process among current immigrant groups has traditionally emphasized the role of residential context in determining adaptation trajectories (Portes and Rumbaut 2001; Waldinger 1989). Yet the ways in which different social contexts may differentially affect immigrants and their children has not yet been established. This paper uses a comparative approach to understand the adaptation process among immigrant youth which will allow us to determine the extent to which processes of adaptation are common across regions and/or are subject to more local conditions.

Residential Context and Segmented Assimilation

In the case of children of immigrants, residential context has been given center stage in explaining divergent outcomes. In their articulation of the theory of segmented assimilation, Portes and Zhou (1993) argue that urban context is a fundamental contributor to the prospects of child immigrants and children of immigrants. In contrast to straight-line assimilation theory which holds that immigrants improve their mobility prospects by becoming more similar to U.S. mainstream society, segmented assimilation holds that the options have become less clear. In the process of growing up American, immigrant children may adopt several trajectories, one of which may involve downward assimilation into social and economic hardship (Portes and Rumbaut 2001). Concentration of immigrant families in economically disadvantaged communities is understood to be a key factor in predicting poor outcomes. But beyond allusions to cumulative disadvantage and close proximity to other U.S. minority groups, very little is known regarding the process through which residential context may or may not influence the well-being

of children of immigrants (Portes, Fernández-Kelly and Haller 2003). Nor do we know the ways in which some neighborhoods may actually provide a buffer against such negative outcomes. Recently, several studies have highlighted a sociospatial dimension to the positive health profiles of many immigrant groups, specifically Latinos (Bond Huie, Hummer and Rogers 2002; Sampson, Morenoff and Raudenbush 2005; Eschbach et al. 2004). In the case of a positive immigrant/co-ethnic concentration effect, salubrious health behaviors are hypothesized to foster special "sociocultural environments" that improve the health of community residents (Eschbach, Ostir, Patel, Markides, and Goodwin 2004) in the same ways that a "barrio advantage" has been hypothesized to protect elderly Mexican-Americans from mortality (Eschbach et al. 2004).

The present study evaluates the role of residential context in contributing to the health behavior outcomes of children of immigrants. We examine two distinct aspects of adolescent health: substance use and delinquent activity. Our focus will be on Latinos, who are now the largest minority youth group in the U.S. Data come from the Los Angeles Family and Neighborhood Survey (LAFANS) and the Project on Human Development in Chicago Neighborhoods (PHDCN).

In the last 15 years, immigrant groups, and in particular Latino immigrant groups such as Mexicans, have begun to initiate new immigrant-receiving areas at the same time that older ones are being altered by immigrant suburbanization (Alba, Logan and Stults 2000; Bean and Stevens 2003; Logan, Alba and Zhang 2002). The increased presence of Latino immigrants in communities across the country underscores the need for a more complete understanding of the role of social context in helping or hindering immigrants and their children.

Data

The Los Angeles Family and Neighborhood Survey (L.A.FANS) is a sample of 65 neighborhoods in Los Angeles County, with about 40-50 households in each

neighborhood and information on the health and well-being of approximately 1,454 adolescents between the ages of 9-17. The Project for Human Development in Chicago Neighborhoods (PHDCN) includes data on approximately 2,974 respondents between the ages of 9-18 drawn from a stratified sample of 80 Chicago neighborhoods. Both datasets were designed explicitly to model multilevel processes.

Examining these processes in more than one locale allows us to better get at *how* social context influences the adolescent well-being of children of immigrants. Both Chicago and Los Angeles are two of the premier immigrant-receiving areas in the U.S. and share many features that are relevant to the developmental trajectories of immigrant children. But there are also many structural features that are different across the residential landscapes of the two cities, including differences in segregation patterns, the size and nature of immigrant co-ethnic communities, and historical settlement patterns, among others. By leveraging differences in the results between the two areas, we are able to shed light on the role of diverse residential contexts in influencing the health and well-being of immigrant adolescents.

Measurement

Outcome Variables

This paper focuses on two indices of health-risk behaviors. We conducted a factor analysis of thirteen different risky behaviors asked to the L.A. FANS respondents and found two distinct scales. The first scale captures substance use behavior and includes four items: 1) cigarette use in the previous month 2) alcohol use in the previous month 3) marijuana use in the previous months and 4) other drug use in the previous month. The second scale taps delinquency and includes four items: 1) skipping school with frequency (>2 times) 2) gang membership in the past year 3) ran away from home 4) gun ownership in the past year. For the LAFANS, all questions in the child module were self-administered by respondents who read the

questions and entered their own answers onto a computer. In the case of the PHDCN, the surveys were administered to the children by an interviewer. In both data collection efforts interviews were conducted in either Spanish or English depending upon the preference of the participant.

Given the sample size and interrelatedness between these items, viewing each item as a separate outcome would be inappropriate. There are also differences in the prevalence of each item that make a summary measure of health risk-behavior equally inappropriate. To address these issues, we create two multi-item scales and use a multivariate multilevel Rasch model that accounts for differences in item severities and person propensities (Raudenbush, Johnson, and Sampson 2003). The log-odds of endorsement of an item for a particular scale depends on item severities and the unique effects associated with the individual child and neighborhood.

The rates of risky behavior in both the LAFANS and PHDCN samples are uniformly lower than those found in national samples. This is true for every racial/ethnic group. One possible explanation is that our samples have higher rates of immigrant children than do national samples. But even if the adolescents in our samples did not accurately report their participation in these health-risk behaviors, the problem of non-reporting bias in the findings is reduced because we are concerned with differences between racial/ethnic/nativity groups and there is no evidence of differential underreporting in the sample. The basic patterns in substance use and delinquent behavior *across* the race/ethnic groups in this sample match those found in national samples (Johnston, O'Malley, Bachman, and Schulenberg 2006).

Individual-Level Explanatory Variables

Each respondent will be distinguished by their race/ethnic background. While there are four race/ethnic groups in the LAFANS data with sufficient sample size (non-Latino White, non-Latino Black, Latino, and Asian), I exclude Asian children from the analysis in order to increase comparability with the PHDCN data

which does not include a sufficient sample of Asians. In the L.A.FANS sample, the overwhelming majority of Latino respondents identified as Mexican-Origin, with the remaining represented by a handful of Central American countries. In order to make the Latino samples comparable across the two samples, Puerto Rican adolescents found in the PHDCN Chicago sample were not included in the analysis. Thus, throughout the paper, when referring to the Latino population, we are more accurately referring to the Mexican-Origin component of the larger Latino population in both Los Angeles and Chicago.

One of the key explanations behind the negative behavioral outcomes of immigrant youth is that more time in the U.S. is associated with increasingly negative behavior, at least to the extent that the child assimilates into disadvantaged segments of the U.S. population. In order to evaluate this possibility for our samples of youth, we distinguish each child Latino child by his/her nativity/generational status.[1]

The LAFANS only obtained information on the country of birth of the primary care giver, resulting in a generational schema based on only one parent. In order to maintain consistency across the two samples we adopt the same coding schema for the PHDCN data. If the child was born outside of the U.S., they are categorized as foreign-born. The second-generation is defined as consisting of Latinos who were born in the United States and whose primary care giver was born outside of the U.S. Respondents are classified as third-or-later generation if they were born in the U.S. and their primary care giver was also born in the U.S. To examine whether or not the traditional generational categories (i.e. foreign-born, second generation, third generation) capture meaningful differences between groups of adolescents, we examined three indicators of acculturation (for the Los Angeles data): the year of initial arrival for the primary care giver, whether the household spoke only Spanish, and whether the primary care giver was undocumented. We were particularly

[1] Only Latinos in the two samples have a large enough sample size to distinguish by generational status.

interested in determining if there were substantive differences between foreign-born and second-generation children, both of whom have foreign-born parents. We found significant differences between the two groups along all of these three measures. These differences become even clearer when we look at familial socioeconomic differences across Latino generations.

Neighborhood-Level Variables. Aspects of social environment that are important for adolescent development include both the structural features of a neighborhood as well as the social processes that characterize the neighborhood. Information on the structural conditions of the neighborhood come from the 2000 census for the LAFANS data and from the 1990 census for the PHDCN data. For the LAFANS data, information on neighborhood social processes come from an aggregation of responses from all randomly selected adults interviewed (n=3,557). In the case of the PHDCN, information on neighborhood social process come from a separate community survey that was administered in 1994-95.

One of the issues we faced, and that plagues many analyses of neighborhood-level effects, is the high level of racial and economic segregation in the U.S. While a high level of spatial social patterning highlights the importance of accounting for the possibility of unique neighborhood-level influences, it also complicates the quantification of these influences. Because of the lack of distributional overlap for many neighborhood properties, it is difficult to distinguish differences in the distribution of a variable from differences in the effects of that variable. It also makes comparisons unreliable if there are insufficient numbers of members of one group living in a particular type of neighborhood (Brewster 1994; McNulty 2001; Sucoff and Upchurch 1998).

In order to address this issue we categorized our neighborhood-level predictors in such a way as to minimize a lack of distributional overlap. Instead of continuous measurement schemes that would result in sparse data at the extremes

(i.e., percent black), we chose to distinguish census tracts using location quotients (LQ), which are measures of under-and over-concentration of particular variables in comparison to the county distribution (Wright, Ellis, and Parks 2005). The LQs have a range of 0 to over +1, where 1 refers to a place where the concentration of a certain characteristic is comparable to the concentration at the county level. We include LQs for the following measures: 1) poverty 2) Latino concentration 3) African-American concentration 4) immigrant concentration 5) non-Latino White concentration.

We also include two neighborhood-level variables that capture different dimensions of neighborhood social organization that are understood to affect the lives of children (Sampson, Morenoff, and Earls 1999). The first, labeled social cohesion, measures the degree to which adults and children in a community are linked to one another. It is a scale constructed from each adult's opinion to a series of five statements, e.g. "Parents in this neighborhood know their children's friends" "Parents in this neighborhood generally know each other…" The second dimension of neighborhood social organization captures informal social control and mutual support of children. This scale is constructed from a series of five opinions on whether or not residents could count on their neighbors to e.g., "do something if children were skipping school or children were showing disrespect to an adult...."

ANALYTIC STRATEGY

To account for variation in the odds of engaging in risky behaviors, we use a three-level Rasch model with random effects (Raudenbush, Johnson, and Sampson 2003). Within this framework it is possible to test whether covariates relate differently to different types of behavior. The first level entails item responses, which depend on item difficulties and person propensities. The second level describes variation and covariation between person propensities within clusters (within neighborhoods). The third level describes variation and covariation between clusters (across neighborhoods).

The models that include neighborhood measures also include controls for the propensity to live in a particular neighborhood, i.e. "propensity scores" (Oakes and Johnson Forthcoming). Propensity scores allow us to 1) assess whether sufficient numbers of subjects were sampled at different levels of the neighborhood exposure of interest, in order to allow us to conduct a robust estimation of the association between such a characteristic and the behavioral outcome; 2) adjust for confounding by individual characteristics of neighborhood residents in a single score, and thus increase statistical power. Propensity scores allow us to test whether neighborhood effects are independent from individual selection into such a neighborhood, i.e. from the propensity to live in a particular type of neighborhood, such as a higher poverty neighborhood.

The propensity score represents the confounders in a single composite. We use separate preliminary logistic regression models to predict the probability of being exposed to each specific neighborhood characteristic, by observed background characteristics that are hypothesized to have preceded the neighborhood exposure. We then use the estimated probability score (herein referred to as the "propensity score") to represent all of the background characteristics in the final outcome model.

Confounders that were used as predictors in the propensity score model include the following for the two samples: number of children in the household, sex of parent, age of parent, race/ethnicity of parent, nativity of parent, education of parent, occupation of parent, language spoken in household, welfare receipt, marital status of parent, residential history of parent, family income, home ownership, family structure, church attendance, parent-child relationship quality, presence of familial problems with fighting/arguing, documented status for immigrant parents, and time since arrival to the U.S. for immigrant parents.[2] Missing confounder variables were given "0" if categorical and the mean value if continuous, and

[2] Occupation of primary care giver, welfare receipt and residential history, were not available in the PHDCN and therefore were not included in the propensity scores for the PHDCN data.

dummy variables indicating the presence of missing observations for each specific covariate were included in the propensity score model.

Each estimated propensity score was introduced into the final outcome model as a continuous variable in order to allow for fine stratification of subjects by the established set of confounders.

The models first estimate the racial/ethnic/nativity differences in the probability of engaging in substance use and delinquency, respectively (Table 3). Next, we test for significant main effects of neighborhood type on health-risk behavior in the two respective cities. Third, we test for interactions between neighborhood context and individual racial/ethnic/nativity affiliation to determine if neighborhood structural and social context influences the odds of engaging in substance use and delinquency differently for each specific race/ethnic group, and more notably, for different immigrant generations of Latino youth (Table 4 and 5). We only test for interactions between variables that have sufficient sample size in order to conduct stable comparison (Teachman and Crowder 2002). All cross-level interaction models also include, as main effects: race/ethnicity/nativity affiliation, a propensity score predicting exposure to the specific neighborhood-level characteristic of interest, as well as measures for neighborhood poverty, Latino concentration, African-American concentration, immigrant concentration, and non-Latino White concentration, as neighborhood-level control variables.

Propensity scores were estimated using SAS, version 9.1 and multilevel models were estimated using HLM, version 6.0.

Descriptive Findings: Los Angeles and Chicago

Table 1 presents the descriptive characteristics of the Los Angeles and Chicago samples. To facilitate comparisons, both samples are distinguished by the racial/ethnic/nativity categorization of the child. Within each grouping the results from the two samples are presented side-by-side. Reflecting differences in the

demographic composition of the two metropolitan areas, there are large differences in the race/ethnic make-up of the two samples. In the data from Los Angeles only 12 percent of the sample identifies as non-Latino Black whereas 42 percent of the Chicago sample is non-Latino Black. While both samples contain a large proportion of Latino adolescents, they constitute a larger proportion of the Los Angeles sample (63 percent compared to nearly 40 percent in the Chicago sample). There are also important differences in the generational composition of the two Latino sub-samples. In Los Angeles, 18 percent of the Latino sample is foreign-born compared to only 9 percent of the sample from Chicago. In both samples, there are considerably less Latino children with native-born parents, i.e. third-generation Latino adolescents (12 percent for Los Angeles and 9 percent for Chicago).

--------Table 1 about here--------

The socioeconomic profiles of the adolescents' primary care givers are highly dependent on individual racial/ethnic/nativity affiliation. In both samples, the starkest disparity in education level and household income is found between children with non-Latino White parents and Latino children with immigrant parents. In the Los Angeles sample, information is available on the average annual income of the primary care giver. On average, non-Latino White children live in households with median annual incomes of 66,000 while foreign-born Latino children reside in households with median incomes of less than 25,000. Third-generation Latino children live in households with median household incomes that are similar to that of non-Latino Blacks, but still considerably lower than that of non-Latino Whites. In the Chicago sample, information is provided on whether the family lived below the poverty threshold. Over half of all foreign-born Latino children live in poverty compared to 43 percent of non-Latino black children and 20 percent of non-Latino White children. There is evidence of limited or even downward mobility out of poverty among Latino adolescents beyond the immigrant generation. Whereas 37

percent of second-generation Latino adolescents live in poverty, this number rises to 39 percent among the third-generation.

In both Chicago and Los Angeles, there are also remarkable differences across the Latino generations in education level. Only between 20-30 percent of Latino primary care givers born abroad have finished high school compared to between 60-80 percent of Latino primary care givers born in the U.S. With regard to the educational profiles of non-Latino Black and non-Latino White primary care givers, the Los Angeles sample is more highly educated than the Chicago sample (e.g. in Los Angeles 9 percent of non-Latino Black primary care givers have not completed high school compared to over 30 percent in the Chicago sample). With regard to marital status, around two-thirds of non-Latino Whites adolescents live in households with married parents. For African-American children, this proportion drops to less than one-half in both Chicago and Los Angeles. For third-generation Latinos, a little over one-half have parents who are married.

Table 1 also presents the distribution of health-risk behaviors by respondents' racial/ethnic background. In general, the adolescents in Chicago demonstrate higher mean levels of high-risk behavior, although the race/ethnic/nativity patterns across the two cities are remarkably similar. In both Los Angeles and Chicago, non-Latino White children have the highest mean number of high-risk behaviors. These distributions are largely driven by substance use as there are fewer differences in delinquent behavior by group. For both behavior types (substance use and delinquency) in Los Angeles and Chicago, first-generation Latinos exhibit the lowest averages. Among the Latino sub-groups, the general pattern in health risk-behavior corresponds to what has been previously documented, i.e. foreign-born adolescents have lower mean numbers of health risk-behaviors than native-born adolescents (i.e. second-generation and third-generation).

The bottom panel of Table 1 presents the race/ethnic/nativity differences in neighborhood characteristics. Reflecting the high level of segregation characterizing

both Los Angeles and Chicago, the race/ethnic groups are differentially distributed along every neighborhood characteristic. In Los Angeles, 80 percent of foreign-born Latinos adolescents live in Los Angeles neighborhoods characterized by above-county-average rates of poverty, compared to only 30 percent of the non-Latino Whites. Foreign-born and second-generation Latinos in Los Angeles are also most likely to live in neighborhoods that are characterized by above-county-average levels of other Latino co-ethnics (90 percent and 82 percent of the sample, respectively). In contrast, only 50 percent of third-generation Latinos in the sample live in neighborhoods that are characterized by an above-county-average level of other Latino co-ethnics.

The Chicago sample demonstrates an even higher degree of racial/ethnic differentiation than the Los Angeles sample. With regard to the Latino population, Latino children with foreign-born parents are almost totally concentrated in neighborhoods with above county-average levels of Latino residents. Even among third-generation Latinos in Chicago (i.e. they and their parents are native-born), over 80 percent live in a high concentration Latino neighborhood (versus only 50 percent in Los Angeles). African-Americans are also more concentrated in Chicago so that 85 percent of non-Latino Black adolescents live in a neighborhood with high levels of other non-Latino Blacks (as compared to only 57 percent in Los Angeles). The only group that is less racially segregated in Chicago as compared to Los Angeles is non-Latino Whites. A little over three-quarters of non-Latino White adolescents live in a high White concentration neighborhood as compared to nearly 85 percent in Los Angeles. In terms of neighborhood poverty level, third-generation Latino children in Chicago are more likely to live in a poor neighborhood than is the case in Los Angeles, which may indicate more limited upward mobility for third-generation Latinos in Chicago than in Los Angeles.

Multivariate Analysis

Individual-Level Effects

In order to examine the relationships between neighborhood characteristics and adolescent health-risk behavior, we model individual behavior as a function of individual and neighborhood characteristics. Table 2 presents the results from the Rasch models that specify the relationship between the predictor variables and the risk of substance use and delinquent behavior in the case of Los Angeles and Chicago. These results are in reference to an underlying propensity to engage in risky behavior. For each scale, the reference category is the behavior with the highest prevalence (alcohol use and skipping school).

--------Table 2 about here--------

The results from Los Angeles are presented on the left side of Table 2 and the results from Chicago on the right side of the table. The first set of models illustrates the extent of racial/ethnic/nativity variation in the odds of engaging in risky behavior. Models 1a and 2a present the overall propensity for substance use and delinquency for Los Angeles residents and Models 1b and 2b present the same coefficients for the Chicago sample. The results indicate that race/ethnic differences in the propensity to engage in high-risk behavior are strikingly similar across the two metropolitan areas. In both Los Angeles and Chicago, every racial/ethnic group, with the exception of third-generation Latinos, is significantly less likely to use substances than non-Latino Whites. Among the Latino subgroups, foreign-born Latinos exhibit the lowest odds of substance use. In Los Angeles, foreign-born Latinos have 60 percent lower odds of using substances as compared to non-Latino Whites (Model 1a: coeff.=-0.74; OR=0.34). In Chicago, the odds of substance use for foreign-born Latinos is 50 percent lower than that of Whites (Model 1b: coeff.=-0.67; OR=0.51). In both Los Angeles and Chicago, third-generation Latinos exhibit health-risk behavior that is closest to, and not significantly different from, non-Latino Whites. There is less racial/ethnic/nativity variation in the overall propensity for delinquent behavior (Model 2a, Model 2b). In the case of Los Angeles, no race/ethnic group is

significantly different from non-Latino Whites in the odds of delinquent behavior. In the case of Chicago, there is one singular exception. Non-Latino Black adolescents are significantly more likely than non-Latino Whites to engage in some form of delinquent behavior (Model 2b: coeff.= 0.49, OR=1.63).

Neighborhood-Level Effects

Models 3a-5a and Model 3b address the possibility that the characteristics of an adolescent's residential context may influence his/her health-risk behaviors. The main neighborhood-level effects evaluate the effect of neighborhood characteristics on health-risk behaviors for the *general* sample of adolescents in Los Angeles and Chicago (separately). Each model also includes a measure for the propensity to live in that particular type of neighborhood, which controls for all measurable confounders in a single composite and provides robust estimates of the neighborhood-level effects. Table 2 presents the race/ethnic neighborhood concentration coefficients that were significantly associated with adolescent health risk-behaviors. In both Los Angeles and Chicago, neighborhood non-Latino White concentration was significantly associated with the odds of using substances (Model 3a and Model 3b). The magnitude of the effect is remarkably similar across the two cities so that adolescents living in neighborhoods with above-county-average levels of non-Latino White residents have over 60 percent higher odds of using substances than otherwise similar individuals living in neighborhoods with below-county-average levels of non-Latino White residents (coeff.=0.52/0.54; OR=1.68/1.71 in Los Angeles and Chicago, respectivley). Once neighborhood-level White concentration is added to the model, the individual race/ethnic effects all lose their significance. The loss of significance is partly due to selection of families with particular characteristics into such neighborhoods, at least for non-Latino Blacks. In models

that do not include a control for the propensity to live in a neighborhood with high White concentration, non-Latino blacks continue to have a significantly lower risk of substance use than non-Latino Whites (results not shown). In the case of high White concentration, the individual-level predictors influencing selection into high White neighborhoods account for part of the variation in race/ethnic differences in substance use in addition to actual residence in high White neighborhoods.

In the Los Angeles sample there are two other significant neighborhood-level predictors of adolescent high-risk behavior that are not evident in the Chicago sample. First, residence in neighborhoods with above-county-average levels of Latino concentration significantly decreases the odds of using a substance by 40 percent (Model 3a: coeff.=-0.56; OR=0.57). Additionally, neighborhood social cohesion appears to be consequential in deterring delinquent behavior among adolescents living in Los Angeles. Residence in neighborhoods characterized by above-mean levels of social cohesion nearly halves the odds of engaging in delinquent behavior (coeff.=-0.67, OR = 0.51). .

Neighborhood and Individual Race/Ethnic/Nativity Interaction Effects. Of particular interest to the present analysis is the possibility that adolescents, and Latino adolescents in particular, are differentially influenced by their social context, net of individual level processes. Previous work on children of immigrants suggests that their outcomes are highly dependent on the nature of their surrounding community (Portes and Rumbaut 2001).

Tables 3 and 4 address this possibility by testing for cross-level interactions between the race/ethnic/nativity status of the respondent and characteristics of his/her neighborhood. If an interaction term is significant in predicting the odds of either substance use or delinquency, its effect on risky-behavior is included in the table, with estimates provided for both outcomes (even if only one is significant, as

indicated by asterisks for significance level). Interaction terms that are not significant in predicting either outcome are not included in the table. Each model that tests for significant cross-level effects includes controls for individual race/ethnic affiliation, the propensity to live in that type of neighborhood, and the neighborhood structural characteristics (non-Latino White concentration, non-Latino Black concentration, Latino concentration, foreign-born concentration, and poverty concentration).

--------Table 3 about here--------

We present the interaction effects by calculating an estimate for the differential influence of particular residential contexts for specific race/ethnic groups. For example, the first row of Table 3 illustrates (in the case Los Angeles) the odds of risky behavior for second-generation Latino children who live in neighborhoods with *above*-county-average concentration of Latinos as compared to second-generation Latino children who live in neighborhoods with *below*-county-average concentration of Latinos (i.e. ((exponentiated main effect of neighborhood Latino concentration * exponentiated main effect of second generation Latino status * exponentiated interaction term between individual second-generation Latino status and neighborhood Latino concentration) / exponentiated main effect of second-generation Latino status) (Jaccard 2001; Wildsmith and Raley 2006).

Los Angeles. In the case of Los Angeles (Table 3), the effect of above-county-average Latino concentration is uniformly disadvantageous for U.S.-born Latinos (i.e. second- and third-generation Latinos) for both substance use and delinquency. Second-generation Latinos living in high Latino neighborhoods have nearly 80 percent higher odds of substance use and over three times higher odds of engaging in delinquent behavior than second-generation Latino adolescents living in neighborhoods with below-county-average Latino concentration (OR=1.79 for substance use, OR =3.45 for delinquency). The same pattern is evident in the case of substance use for third-generation Latinos living in above-county-average Latino

neighborhoods, whose odds of substance use are nearly two times more likely than their counterparts living in below-county-average Latino neighborhoods (OR=1.97). Far from a positive co-ethnic effect, the pattern in Los Angeles County is for co-ethnic concentration to increase the risk of negative health behaviors in the case of U.S.-born children of Latino immigrants.

A similar pattern is evident for neighborhood poverty level. In the general sample, poverty level is not significantly associated with either substance use or delinquency. Testing for non-uniformity of effects demonstrates that, for second-generation Latino adolescents, as well as African-Americans, residence in above-county-average poverty neighborhoods is associated with a two-to-three fold increased risk of delinquency as compared to each groups' ethnic counterparts living in below-county-average poverty neighborhoods. For these U.S. minority groups, neighborhood poverty appears to play a consequential role in influencing their odds of risk-taking behavior in a way that it does not for the general sample of Los Angeles adolescents.

In the case of substance use, a differential effect of non-Latino White neighborhood concentration is evident in the case of Latinos with foreign-born parents (i.e. foreign-born Latinos and second-generation Latinos). Residence in neighborhoods with above-county-average levels of non-Latino Whites reduces the odds of substance use for foreign-born Latinos by nearly 70 percent (OR=0.34) and almost halves the odds of substance use for second-generation Latinos (OR=0.59). In the case of delinquent behavior, this pattern reverses itself for non-Latino Black adolescents. Residence in a neighborhood with above-county average levels of White residents increases the odds of delinquent behavior for non-Latino Blacks by nearly 5 fold. This effect is dwarfed by the result for residence in a non-Latino Black neighborhood. Non-Latino black adolescents who reside in neighborhoods with above-county average levels of other non-Latino blacks increase their odds of engaging in delinquent behavior by 10 fold. Non-Latino Black teens also illustrate a

perplexing pattern whereby residence in neighborhoods with above-county average levels of social control increases their odds of substance use by over 5-fold (OR=5.89). Conversely, in the case of second-generation Latinos, neighborhood social cohesion dramatically reduces their odds of delinquent behavior (OR=.23).

There is one significant effect of neighborhood immigrant concentration. For foreign-born Latinos only, residence in a neighborhood with above-county levels of immigrants is associated with decreased odds of delinquent behavior. That is, if an adolescent is foreign-born themselves, residence in a census tract with above county-levels of other immigrants reduces their odds of delinquent behavior. This effect provides some support for a positive "immigrant concentration" effect that has been found in other studies.

Chicago. In the case of Chicago (Table 4), Latino neighborhood concentration does not appear to have the same negative influence on the odds of substance use and delinquency as it does in the Los Angeles context. Neighborhood Latino concentration is not significantly associated with the odds of substance use or delinquency for any of the racial/ethnic groups included in the Chicago analysis. Instead, neighborhood non-Latino Black concentration appears to be the neighborhood characteristic that increases the odds of risky behavior for U.S.-born Latinos in Chicago. Among U.S.-born Latinos (i.e. second- and third-generation Latinos), the effect of above-county-average non-Latino Black concentration is uniformly disadvantageous for both substance use and delinquency. Third-generation Latinos living in high non-Latino Black neighborhoods have 46 percent higher odds of substance use and 30 percent higher odds of engaging in delinquent behavior than third-generation Latino adolescents living in neighborhoods with below-county-average non-Latino Black concentration (OR=1.46 for substance use, OR =1.30 for delinquency). The same pattern is evident in the case of delinquency for second-generation Latinos living in above-county-average non-Latino Black

neighborhoods, whose odds of delinquency are 85 percent higher than their counterparts living in below-county-average non-Latino Black neighborhoods (OR=1.85). As a corollary to the case in Los Angeles, where co-ethnic Latino concentration increased the risk of negative health behaviors for U.S.-born children of Latino immigrants, non-Latino Black concentration appears to play a similar role in Chicago.

In addition to U.S.-born Latino adolescents, neighborhood non-Latino Black concentration is also associated with an increased risk of substance use and delinquent behavior for non-Latino Black adolescents. This same relationship was also evident in Los Angeles for delinquent behavior. Non-Latino Black adolescents living in neighborhoods with above-county level concentrations of non-Latino Black adolescents exhibit odds of substance use that are 62 percent higher than non-Latino Black adolescents in living in neighborhoods with below-county average concentrations of non-Latino Black residents (OR=1.62). In the case of delinquent behavior, the increase is on a similar order, with odds of delinquent behavior close to 70 percent higher (OR=1.68).

Neighborhood poverty level does not appear to play the same role in influencing risky behavior as it does in the case of Los Angeles. Neither in the general sample nor across different race/ethnic groups was neighborhood poverty level significantly associated with adolescent substance use or delinquent behavior. One possible reason for the discrepancy in results may have to do with the way that poverty was measured across the two samples. Further analyses will be conducted to explore this possibility.

A differential effect of non-Latino White neighborhood concentration is evident in the case of second-generation Latinos and non-Latino Black adolescents, however the direction is not the same as it was in the case of Los Angeles. Whereas in Los Angeles, residence in neighborhoods with above county White concentration was associated with decreased odds of substance use and delinquent behavior for

U.S. born Latinos, in the case of Chicago, higher levels of neighborhood White concentration are associated with an increased risk of substance use for second-generation Latino adolescents (1.21) and non-Latino Black adolescents (OR=1.08).

In the case of neighborhood social processes, a similar effect of neighborhood social control is found for foreign-born Latinos as was documented for non-Latino Blacks in the Los Angeles sample. Residence in neighborhoods with above-county average levels of social control increases the risk of substance use for foreign-born Latinos by over five-fold (OR=5.84). Conversely, neighborhood social cohesion reduces the risk of delinquent behavior for non-Latino Blacks by nearly 30 percent (OR=0.71).

Discussion

This analysis was concerned with examining the influence of social context on the adaptation process of Latino youth. A comparison of neighborhood influence across two different contexts (Los Angeles and Chicago) allowed us to determine whether particular patterns of high-risk behavior were unique to certain cities or were a more universal immigrant experience. We found that although neighborhood social patterning differed across the two cities, the effects of this patterning, specifically racial segregation patterns, were quite similar. In Los Angeles we found that U.S.-born Latinos were particularly susceptible to negative health risk behaviors if they lived in communities that had high concentrations of other Latino co-ethnics and/or poverty. In Chicago, on the other hand, it was residence in high non-Latino Black communities that resulted in excess risk for second and third-generation Latinos.

We argue that both sets of results illustrate the negative effects of segregation and concentrated disadvantage on Latino children of immigrants. The differences only reflect differences in the nature of segregation in both areas, not differences in the underlying processes. In Los Angeles, Latinos are the dominant minority group and are hypersegregated in a way that they are not in Chicago, where it is African-

Americans that experience the most extreme forms of segregation and disadvantage. Essentially, for Latino children of immigrants, residence in areas close to the dominant minority group is associated with excess risk of poor health behaviors. In Los Angeles this group consists of other co-ethnic Latinos. In Chicago, this group appears to be African-Americans. The fact that the negative effects of residence in these two types of communities were particularly pronounced for U.S.-born Latinos, and not foreign-born Latinos, lends support to the contention put forth in the segmented assimilation literature, that it is the U.S. born children who are at highest risk of downward assimilation.

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Table 1. Chicago. Percent Distribution of Selected Variables, by Race/Ethnicity and Generational Group.

	Non-Latino White		Non-Latino Black		Latinos by Generation					
					1st	1st	2nd	2nd	3rd	3rd
	LA	Chi.	LA	Chi	LA	Chi	LA	Chi.	LA	Chi.
Individual-Level										
Percent of Sample	24.5	18.0	12.0	42.7	18.2	8.6	33.6	22.0	11.7	8.7
PCG Education[1]										
<12 years	9.7	23.1	9.7	29.6	69.2	77.6	70.1	77.6	20.4	37.8
12 ≥ years	90.3	76.9	90.3	70.4	30.8	22.4	29.9	22.4	79.6	62.2
Median HH income	66,000	n/a	44,500	n/a	22,520	n/a	27,388	n/a	44,000	n/a
Family Poverty										
No	n/a	80.9	n/a	56.8	n/a	44.6	n/a	62.7	n/a	60.7
Yes	n/a	19.1	n/a	43.2	n/a	55.4	n/a	37.3	n/a	39.3
PCG Marital Status										
Not Wed	21.1	34.1	55.4	66.5	38.9	21.7	30.6	26.4	45.8	41.7
Wed	79.0	65.9	44.6	33.5	61.1	78.3	69.4	73.6	54.2	58.3
Mean for All Behaviors	0.72	0.89	0.53	0.85	0.50	0.57	0.57	0.78	0.52	0.71
Mean for Substance	0.45	0.47	0.21	0.25	0.26	0.27	0.23	0.29	0.33	0.38
Mean for Delinquen.	0.27	0.42	0.32	0.59	0.24	0.30	0.33	0.50	0.20	0.33
Neighborhood-Level										
Above County Level:										
White	84.0	76.3	29.2	6.3	7.5	22.9	13.2	23.6	37.4	34.5
Black	31.4	8.1	57.3	85.9	22.7	12.1	22.9	11.3	34.0	19.1
Latino	9.6	49.1	43.2	32.0	89.5	96.4	82.1	94.3	50.1	83.3
Poverty	30.3	24.3	58.4	61.4	80.9	67.5	68.9	67.5	37.1	56.0
Fborn	30.6	65.3	39.2	25.7	88.0	97.6	78.4	93.9	36.9	82.1
N	192	173	94	412	143	83	263	212	92	85

[1] PCG stands for Primary Care Giver. Data Source: Los Angeles Family and Neighborhood Survey (LAFANS) 2001 and Project on Human Development in Chicago Neighborhoods 1994-1995.

Table 2. Coefficients from Multi-Level Logistic Regression Model of Substance Use and Delinquency. Main Effects.

	Los Angeles (LAFANS) [1]					Chicago (PHDCN) [2]		
	Substances Model 1a	Delinquency Model 2a	Substances Model 3a	Substances Model 4a	Delinquency Model 5a	Substances Model 1b	Delinquency Model 2b	Substances Model 3b
Individual Race/Ethnicity								
Black	-1.08*	0.22	-0.74	-1.00	0.04	-0.67**	0.49**	0.03
	(0.47)	(0.35)	(0.52)	(0.54)	(0.41)	(0.19)	(0.19)	(0.26)
FB Latino	-0.74*	-0.25	-0.16	-0.49	-0.44	-0.67*	-0.27	-0.14
	(0.31)	(0.27)	(0.50)	(0.49)	(0.36)	(0.31)	(0.22)	(0.34)
2nd Latino	-0.69*	-0.29	-0.15	-0.44	0.05	-0.56**	0.24	-0.03
	(0.29)	(0.25)	(0.44)	(0.42)	(0.35)	(0.21)	(0.20)	(0.27)
3rd Latino	-0.42	-0.36	-0.06	-0.30	-0.44	-0.23	-0.17	0.19
	(0.33)	(0.27)	(0.46)	(0.44)	(0.34)	(0.29)	(0.21)	(0.30)
Neighborhood Structural Features								
LC Latino				-0.56*				
				(0.25)				
LC White			0.52*					0.54***
			(0.25)					(0.11)
Neighborhood Social Organization								
LC Cohesion					-0.67**			
					(0.19)			

* p<.05, ** p<.01, ***p<.001. Standard errors are in parentheses.

[1] Data Source: Los Angeles Family and Neighborhood Survey (LAFANS).

[2] Data Source: Project on Human Development in Chicago Neighborhoods (PHDCN).

Models include the following: Model 3a: a measure that captures the propensity to live in an above-county-average Latino census tract. Model 4a and 3b: a measure that captures the propensity to live in an above-county-average White census tract. Model 5a: a measure that captures the propensity to live in a census tract with an above sample mean of social cohesion. The variables included in the propensity scores are listed in the text.

Table 3. Odds Ratios for Cross-level Interactions between Individual Race/Ethnic/Nativity Affiliation and Neighborhood Characteristics for Los Angeles.

Neighborhood Type	Substance Use	Delinquency
Odds of risky-behavior for **2nd Generation Latinos** who live in neighborhoods with:		
Above county-average Latino concentration	1.79**	3.45*
Odds of risky-behavior for **3rd Generation Latinos** who live neighborhoods with:		
Above County-Average Latino Concentration	1.97**	0.75
Odds of risky-behavior for **2nd Generation Latinos** who live neighborhoods with:		
Above County-Average Poverty Concentration	1.29	1.91**
Odds of risky-behavior for **non-Latino Blacks** who live neighborhoods with:		
Above County-Average Poverty Concentration	1.21	3.03**
Odds of risky-behavior for **2nd Generation Latinos** who live neighborhoods with:		
Above County-Average White Concentration	0.59**	0.60
Odds of risky-behavior for **Foreign-born Latinos** who live in neighborhoods with:		
Above county-average White concentration	0.34***	1.28
Odds of risky-behavior for **Foreign-born Latinos** who live in neighborhoods with:		
Above county-average Immigrant concentration	0.600	0.45*
Odds of risky-behavior for **non-Latino Blacks** who live neighborhoods with:		
Above County-Average Black Concentration	1.90	10.79**
Odds of risky-behavior for **non-Latino Blacks** who live neighborhoods with:		
Above County-Average White Concentration	2.81	4.98**
Odds of risky-behavior for **non-Latino Blacks** who live neighborhoods with:		
Above County-Average Levels of Social Control	5.89**	0.46
Odds of risky-behavior for **2nd Generation Latinos** who live neighborhoods with:		
Above County-Average Levels of Social Cohesion	0.78	0.23*

* p<.05, ** p<.01, ***p<.001. The reference category for each cross-level interaction is made up of members of the same race/ethnic group who live in a neighborhoods characterized by below-county-average levels of the particular neighborhood characteristic. Each cross-level interaction model includes controls for: 1) individual race/ethnic affiliation, 2) measures of neighborhood structural characteristics (LC Black, LC White, LC Foreign-born, LC Latino, LC Poverty), and 3) a control for the propensity to live in that particular neighborhood.
Data Source: Los Angeles Family and Neighborhood Survey (LAFANS).

Table 4. Odds Ratios for Cross-level Interactions between Individual Race/Ethnic/Nativity Affiliation and Neighborhood Characteristics for Chicago.

Neighborhood Type	Substance Use	Delinquency
Odds of risky-behavior for **2nd Generation Latinos** who live neighborhoods with:		
Above county-average non-Latino Black concentration	0.79	1.85**
Odds of risky-behavior for **3rd Generation Latinos** who live in neighborhoods with:		
Above county-average non-Latino Black concentration	1.46*	1.30*
Odds of risky-behavior for **non-Latino Blacks** who live in neighborhoods with:		
Above county-average non-Latino Black concentration:	1.62**	1.68**
Odds of risky-behavior for **2nd Generation Latinos** who live in neighborhoods with:		
Above county-average non-Latino White concentration	1.21*	1.16
Odds of risky-behavior for **non-Latino Blacks** who live in neighborhoods with:		
Above county-average non-Latino White concentration	1.08**	0.60
Odds of risky-behavior for **non-Latino Blacks** who live in neighborhoods with:		
Above county-average Levels of Social Control	1.01	1.11*
Odds of risky-behavior for **non-Latino Blacks** who live in neighborhoods with:		
Above county-average Levels of Social Cohesion	0.68	0.71*
Odds of risky-behavior for **Foreign-Born Latinos** who live in neighborhoods with:		
Above county-average Levels of Social Control	5.84*	2.73

* p<.05, ** p<.01, ***p<.001. The reference category for each cross-level interaction is made up of members of the same race/ethnic group who live in a neighborhoods characterized by below-county-average levels of the particular neighborhood characteristic. Each cross-level interaction model includes controls for: 1) individual race/ethnic affiliation, 2) measures of neighborhood structural characteristics (LC Black, LC White, LC Foreign-born, LC Latino, LC Poverty), and 3) a control for the propensity to live in that particular neighborhood.
Data Source: Project on Human Development in Chicago Neighborhoods (PHDCN).