

# **Cohort and generation differences in mental health among immigrant adolescents: the influence of family and community**

**Felicia Yang DeLeone, Cornell University**

*Submitted to the Population Association of American for inclusion in the 2008 Conference*

## **Specific Aims**

The proposed research examines cohort and generation differences in predictors of psychological well-being among U.S. immigrant adolescents. The analysis specifically focuses on the influence of family and community characteristics and addresses the following questions:

- What are the *associations* between cohort, generation status, and mental health in the immigrant adolescent population?
- How well do community and family characteristics *predict* psychological well-being for adolescent immigrants from varying cohorts and generations?
- How do these effects *differ* by cohort and generation?

To disentangle generational change from cohort differences, both the 1979 and 1997 cohorts of the National Longitudinal Survey of Youth are used. This research extends the literatures on both immigrant assimilation and adolescent mental health by accommodating these factors; existing work on immigrant adaptation in mental health does not consider shifts in cohort composition exhibited in the United States since 1950. Further, few studies include measures of family background and community characteristics unique to the immigrant experience.

## **Background and Significance**

Substantial changes in the volume and composition of immigration to the United States in the past five decades have contributed to renewed interest in the well-being of immigrant adolescents. Levels of immigration have steadily increased since the mid-19<sup>th</sup> century, particularly in the last fifteen years; on average, nearly a million persons have arrived to the United States in each year since 1990 (Department of Homeland Security, 2006). In 2003, 33.5 million foreign-born individuals, comprising 11.7 percent of the US population, resided in the United States and children of immigrants (both foreign and native born) made up approximately 20% of the under-18 population (Larsen, 2004). This wave of immigration has not only increased the size and prominence of the foreign-born population but has altered the way it looks as well. Since the 1950s, Europe, which provided over half of all new migrants to the United States, has been replaced by Asia and Latin America as the leading sender of immigrants (Department of Homeland Security, 2006). Those arriving from Europe comprised only 15 percent of all immigration between 2000 and 2006, while Asia and Latin America contributed roughly 32 percent each. In 2003, 53.3 percent of all U.S. immigrants were born in Latin America, 25 percent hailed from Asia, and only 8 percent were from Europe.

Changes in the composition of new immigrants arriving to the United States are not limited to country of origin; variation in socioeconomic status and demographic characteristics has been documented as well. Apparent declines in the human capital content of new migrants have fueled growing interest regarding the “quality” of recent immigrants, and several studies have indicated that new immigrants have less years of schooling and labor market skills relative to natives than did earlier immigrants (Schultz, 1998). Contemporary immigrants also tend to be poor and low-skilled (Larsen, 2004) and there is evidence that recent immigrants use welfare at

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grater rates than natives and earlier migrants (Borjas and Hilton, 1996; Fix et al, 1996). Notably, today's young immigrants experience unique family and community environments. For example, young immigrants may be more likely to grow up in a two bio-parent family, to reside with an extended family member, and to speak a language other than English at home than non-immigrants (Tolnay, 2004; Brandon, 2002; Oprea & Landale, 1997). Further, immigrant adolescents may be more likely to reside in urban areas with high poverty and unemployment rates and a large minority concentration, compared to natives (Rumbaut, 1996). As these factors have long been linked to psychological well-being (Patten et al., 1997; Aneshensel & Sucoff, 1996), it is reasonable to expect young immigrants from varying arrival cohorts to differ along this dimension. Indeed, both the incidence and predictors of psychological well-being are likely to reflect changes in the composition of the immigrant population.

The present study examines cohort and generational changes in predictors of psychological well-being among immigrant adolescents. Specifically, the role of family background and community characteristics are considered. A number of studies on immigrant adaptation have examined generational differences in mental health outcomes and, in general, have found little difference between immigrants and natives in psychological well-being, even as the foreign-born population bears socioeconomic disadvantage. Indeed, some research has revealed an immigrant advantage in psychological well-being that deteriorates with generation (Harker, 2001). This analysis tests the hypothesis that some of the apparent immigrant advantage can be quantified in the communities and families these adolescents develop in. Further, as few previous studies accommodate for the cohort differences that underlie comparisons across generations at a given point in time, this study aims to provide a more robust understanding of the mental health status of this increasingly salient population.

## **Data, Research Design and Methods**

As noted, a major complexity with research addressing the adaptation of immigrants is the difficulty separating generation from cohort effects; apparent assimilation may be confounded by cohort differences. For the purposes of this research, an individual is classified as first generation if he or she was born outside of the United States and migrated some time after birth. Second generation refers to those who were born in the United States of at least one foreign-born parent and the third-plus generation includes any native-born individual with two native parents. The cohort groups used in this analysis include those who were young adults in the late 1970s and 1990s. Two datasets, the 1979 and 1997 National Longitudinal Surveys of Youth (NLSY79, n = 12,686; NLSY97, n = 8984) are combined so two cohorts of young adults may be examined across three generation groups (see Table 1 for preliminary descriptive statistics). The NLSY79 respondents were born between 1957 and 1964 and were 14 to 22 years old in 1979; the NLSY97 draws from a pool of young adults born between 1980 and 1985 who were 12 to 16 years old in 1997. A wide range of arrival cohorts are included in the analysis as a result. Second-generation immigrants who were young adults in the late 1970s are likely to be the children of immigrants who arrived in the 1950s. First generation immigrants during the same time period most probably migrated in the following decade. Likewise, second generation young adults in 1997 cohort are most likely to be the children of immigrants who arrived in the

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1970s; their first-generation counterparts almost certainly immigrated in the 1980s. In this way, the present analysis includes young adults from immigrant streams arriving both before and after the 1965 Immigration and Nationality Act and its related composition changes.

This research relies on a series of logistic regression models to formally test associations between mental health, measured by depression, and family and community characteristics. An additional set of analyses examining use of mental health services may be included as well. Specifically, family income, size, and composition (e.g. the presence of extended family members in a respondent's household) as well as a measure of whether a foreign language is spoken in a respondent's home are incorporated in the analyses. As stated, these family indicators may be especially relevant to the immigrant adolescent population. Additionally, variables measuring the percent of a respondent's community that is black, in poverty, unemployed, or foreign-born are also included in hopes of capturing community effects unique to the immigrant experience. A series of basic controls, such as race, maternal education, family structure, and religious background are included as well.

After first providing a descriptive portrait of adolescent mental health in the immigrant population by generation and cohort, six basic regressions (one for each generation and cohort combination) will be estimated separately for men and women. A series of additional logistic regression models that include cohort and generation measures as well as models interacting cohort, immigrant generation, and independent variables are then estimated to test for significant differences along these dimensions. The process will be repeated three times, with the first set of analyses including only basic individual and family background variables, the second set incorporating community characteristics in addition to these variables, and the third set testing the influence of immigrant-specific family background measures. All models will be clustered by household to account for the presence of siblings in the data and use robust standard errors. Finally, regression decomposition analysis will be used to disentangle the effects of changes in the mean value of explanatory variables by immigrant generation and cohort from differences in their influence for each individual group.

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**Table 1a: Preliminary descriptive statistics for women by cohort and immigrant status**

	First generation		Second generation		Third + generation	
	NLSY79	NLSY97	NLSY79	NLSY97	NLSY79	NLSY97
<i>Race</i>						
Non-hispanic white	0.46	0.38	0.73	0.46	0.81	0.76
Non-hispanic black	0.11	0.09	0.04	0.08	0.15	0.18
Hispanic	0.43	0.53	0.23	0.46	0.04	0.06
<i>Maternal education</i>						
Less than high school	0.58	0.49	0.45	0.32	0.33	0.15
High school	0.32	0.22	0.30	0.27	0.47	0.37
More than high school	0.10	0.29	0.24	0.41	0.21	0.48
<i>Family structure at age 14</i>						
Two biological parents	0.74	0.60	0.75	0.59	0.74	0.49
Catholic	0.67	0.50	0.50	0.45	0.30	0.20
<i>Community characteristics</i>						
Percent black	12.81	11.62	10.00	11.34	11.82	12.53
Percent foreign	23.02	14.90	22.41	13.72	15.34	4.97
Percent poverty	11.28	9.16	10.34	9.72	11.48	10.23
Unemployment	4.79	7.08	4.63	7.08	4.42	6.78
<i>Family characteristics</i>						
Income < 20K	0.56	0.45	0.53	0.23	0.51	0.21
> 5 family members	0.61	0.62	0.60	0.46	0.54	0.41
Extended family	0.13	0.13	0.10	0.11	0.12	0.11
Foreign language at home	0.87	0.76	0.54	0.60	0.06	0.05
Number of observations	317	301	333	579	4200	3505

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**Table 1b: Preliminary descriptive statistics for men by cohort and immigrant status**

	First generation		Second generation		Third + generation	
	NLSY79	NLSY97	NLSY79	NLSY97	NLSY79	NLSY97
<i>Race</i>						
Non-hispanic white	0.49	0.45	0.72	0.43	0.82	0.75
Non-hispanic black	0.06	0.07	0.01	0.08	0.15	0.18
Hispanic	0.45	0.49	0.27	0.48	0.03	0.07
<i>Maternal education</i>						
Less than high school	0.59	0.50	0.36	0.33	0.28	0.15
High school	0.26	0.13	0.43	0.26	0.50	0.39
More than high school	0.15	0.37	0.21	0.41	0.22	0.46
<i>Family structure at age 14</i>						
Two biological parents	0.78	0.67	0.71	0.66	0.75	0.53
Catholic	0.63	0.44	0.47	0.47	0.31	0.24
<i>Community characteristics</i>						
Percent black	13.62	12.00	9.76	12.49	11.27	12.33
Percent foreign	21.10	16.82	21.68	15.30	15.89	5.02
Percent poverty	11.61	9.65	10.57	9.49	10.91	10.29
Unemployment	4.62	7.13	4.68	6.98	4.36	6.87
<i>Family characteristics</i>						
Income < 20K	0.67	0.37	0.57	0.26	0.54	0.19
> 5 family members	0.65	0.64	0.50	0.53	0.58	0.41
Extended family	0.15	0.14	0.08	0.11	0.11	0.11
Foreign language at home	0.90	0.68	0.55	0.60	0.08	0.06
<hr/> <hr/>						
Number of observations	342	284	319	622	4102	3693

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