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Extended Abstract

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Rethinking the Effect of Duration on Immigrant Health: Evidence from the National Health Interview Survey (2006-2008) and the New Immigrants Survey (2003)

There is compelling evidence in the health literature that immigrants have better health profiles than native-born Americans and their children are healthier and less likely to die (e.g., Frisbie, Cho, and Hummer 2001; Landale, Oropesa, and Gorman 2000). It is also well documented that the longer immigrants have lived in the U.S., the worse their health and the higher the risk of death to their infants (e.g., Markides and Coreil 1986; Cho et al. 20004; Antecol and Bedard 2006). The finding that duration is associated with immigrant health decline is typically interpreted as positive evidence for "negative acculturation." This perspective stresses that the importance of home culture that buffers stress and fosters healthy behaviors (Abraido-Lanza et al. 1999). It also posits that the protective culture effect begins to dissipate and thus health deteriorates as immigrants become more acculturated (Scribner 1996; Jasso et al. 2004).

The strongest evidence of negative acculturation points toward the increased unhealthy behaviors and weakened social support over time. Due to a lack of more precise measures, it is generally accepted that duration serves as the single proxy variable for acculturation (e.g., Antecol and Bedard 2006; Frisbie et al. 2001; Cho et al. 20004; Cho and Hummer 2001). Therefore, numerous studies find that recent immigrants seem to retain protective aspects from their home culture; they are less likely to smoke, drink heavily, use illegal drugs, be sedentary, and eat an unhealthy diet (Landale et al. 1999; Guendelman and Abrams 1995; Guendelman and English 1995; Lopez-Gonzalez et al. 2005; Singh and Siahpush 2002). The more years they have resided in the U.S., the weaker their family ties are; the more likely they are to smoke, drink alcohol, eat junk food and meat, and the more likely they are to be overweight or obese (Akresh 2007; Lauderdale and Rathouz 2000; Singh and Siahpush 2002; Lopez-Gonzalez et al. 2005; Antecol and Bedard 2006; Landale et al. 1999).

Given that most immigrants are healthy upon arrival and their goal is to improve their economic future, the negative acculturation argument seems counterintuitive. It sounds even contradictory when empirical studies show that acculturation can also renders great benefits. Immigrants who are less adjusted in terms of language skills, employment networks and other aspects of social life are at a higher risk of economic disadvantage (Angel, Buckley and Sakamoto 2001; Angel, Buckley and Finch 2001). Duration of residence is found to have a strong effect on health care utilization (LeClere et al. 1994; Frisbie et al. 2001). Recent arrivals are the least likely to receive timely heath care, compared with long-term immigrants and the native-born (Pol et al. 2002). In contrast, immigrants who have stayed long enough to become U.S. citizens are more apt to report regular health screening and receive employer-sponsored health insurance or government coverage than noncitizens (Echeverria and Carrasquillo 2006;

Carrasquillo et al. 2000). However, when duration is used to assess the relationship between acculturation and health, with few exceptions, previous studies consistently fail to find any positive evidence that acculturation is beneficial to immigrant (e.g., Frisbie et al. 2001; Cho et al. 2004; Akresh 2007).

My paper aims to investigate this contradiction. First, I theoretically examine how the choice of using duration to measure acculturation constitutes a methodological weakness and thus compromises the conclusions reached. By looking at acculturation as a process, I elucidate why length of duration is related with health should not be directly translated as the association between acculturation and health. Next, I argue that, in order to gain a complete understanding of duration effects and better guide immigration and health research, it is imperative to adopt a socioeconomic approach with an emphasis on socioeconomic diversity among immigrants and the effect of socioeconomic factors on health. Thirdly, by employing two national datasets, I further take this question apart and provide an evidence-based explanation why we observe what we have observed regarding negative duration effects.

Data for the analysis comes from multiple years of National Health Interview Surveys (NHIS) from 2003 to 2007 and the 2003 New Immigrant Survey (NIS). Outcome variables include self-rated health, functional limitations and numbers of chronicle diseases. The key socioeconomic variables refer to educational attention, levels of income, and occupation characteristics and homeownership. First, a cluster analysis will be used to identify socioeconomic strata within immigrants using each dataset. Second, a series of generalized linear models will be carried out to shed light on immigrant health selection and subsequent health trajectories. Duration effects on immigrant health are studied in two ways. The immigrant-native comparisons use the native-born as the reference group, while with-in immigrant comparisons treat the long-term immigrants as the reference group. The use of two different datasets is justified because of their distinctive target population. NHIS samples all non-institutionalized civilian foreign-born persons, while NIS is a national representative of legal immigrants who have recently acquired legal permanent residency. Duration in NHIS ranges from less to one year to an open-end category of more than 15 years. In contrast, values of duration variables are more concentrated in NIS. Furthermore, given all the subjects in NIS have recently obtained legal permanent residency, I am expecting to tease out more complicating information from the duration effect using NIS.

Findings from this study will have significant implications on studies on immigration and health. First, my results will reveal how truly duration can reflect acculturation and how much previous studies have missed to interpret other factors included in the measure of duration. Second, my results will clearly show whether duration has a deleterious effect on immigrant health or not. If it does, we will be able to tell whether this effect is universal to all immigrants, or only immigrant with certain socioeconomic characteristics. Taken together, the results from this paper should help readers to explore the validity of "negative acculturation" argument and figure out how to approach the question of immigrant health differentials in a better way.

References

Abraido-Lanza, A.F., B.P. Dohrenwend, D.S. Ng-Mak, and J.B. Turner. 1999. "The Latino Mortality Paradox: A Test of the "Salmon Bias" and Healthy Migrant Hypotheses." *American Journal of Public Health* 89:1543–48.

Antecol, Heather and Bedard, Kelly. 2006 Unhealthy Assimilation: Why Do Immigrants Converge to American Health Status Levels? *Demography* 43 (2): 337-360.

Akresh, Ilana Redstone. 2007. "Dietary Assimilation and Health among Hispanic Immigrants to the United States." *Journal of Health and Social Behavior* 48(4): 404-417.

Angel, Jacqueline, Cynthia J. Buckley and Art Sakamoto. 2001. "Duration or Disadvantage? Exploring Nativity, Ethnicity, and Health in Midlife." *Journal of Gerontology: Social Sciences* (56B): 8275-8284.

Angel, Jacqueline, Cynthia J. Buckley and Brian Karl Finch. 2001. "Nativity and Sedf-Assessed Health among Pre-Retirement Age Hispanics and Non-Hispanic Whites." *International Migration Review* 35:784-803.

Carrasquillo, Olveen, Angels I. Carrasquillo, and Steven Shea. 2000. "Health Insurance Coverage of Immigrants Living in the United States: Differences by Citizenship Status and Country of Origin." *American Journal of PublicHealth* 90: 917-23.

Cho, Youngtae, W. Parker Frisbie, Robert A. Hummer and Richard G. Rogers. 2004. "Nativity, Duration of Residence, and the Health of Hispanic Adults in the United States." *International Migration Review* 38: 184–211.

Echeverria SE, Carrasquillo O. 2006. "The Roles of Citizenship Status, Acculturation, and Health Insurance in Breast and Cervical Cancer Screening among Immigrant Women." *Medical Care* 44:788–92.

Frisbie, W. P., Cho. Y., and Hummer, R. A. 2001. "Immigration and the Health of Asian and Pacific Islander Americans in the United States." *American Journal of Epidemiology* 153: 372-380.

Guendelman, S. and P. B. English. 1995. "Effect of United States Residence on Birth Outcomes among Mexican Immigrants: An Exploratory Study." *American journal of Epidemiology* 142:S30-S38.

Landale, Nancy S., R.S. Oropesa, Bridget K. Gorman. 2000. "Migration and Infant Death: Assimilation or Selective Migration among Puerto Ricans?" *American Sociological Review* 65:888-909.

Lauderdale, D. S. and P. J. Rathouz. 2000. "Body Mass Index in a US National Sample of Asian Americans: Effects of Nativity, Years since Immigration and Socioeconomic Status." *International Journal of Obesity* 24: 1188-94.

LeClere, F. B. I. Jensen and A.E. Biddlecom. 1994. "Health Care Utilization, Family Context, and Adaptation among Immigrants to the United States." *Journal of Health and Social Behavior* 35: 370-84.

Lopez-Gonzales, Lorena, Veronica C. Aravena, Robert A.Hummer. 2005. "Immigrant Acculturation, Gender and Health Behavior: a Research Note." *Social Forces* 84: 582-593.

Markides, Kyrakos S. and Jeannine Coreil. 1986. "The Health of Hispanics in the Southwestern United States: An Epidemiological Paradox." *Public Health Reports* 101: 253-65.

Mutchler, Jan E., Archana Prakash and Jeffrey A. (Jeffrey Allan) Burr. 2007. The Demography of Disability and the Effects of Immigrant History: Older Asians in the United States. *Demography* 44 (2): 251-63.

Pol LG, Adidam PJ, Pol J. 2001. "Health Insurance Status of the Adult, Nonelderly Foreign-Born Population." Journal of Immigrant Health 4:103-10

Singh, Gopal K. and Mohammad Siahpush. 2002. "Ethnic-Immigrant Differentials in Health Behaviors, Mortality, and Cause-Specific Mortality in the United States: An Analysis of Two National Data Bases.". *Human Biology* 74: 83-109.

Weigers, Margaret E. and Margaret S. Sherraden. 2001. "A Critical Examination of Acculturation: The Impact of Health Behaviors, Social Support and Economic Resources on Birth Weight among Women of Mexican Descent." *International Migration Review* 35 (3): 804–839.