Pre- and Post-Immigration Alcohol Use Among Recent Latino Immigrants

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BACKGROUND

Compared to other U.S. ethnic groups, Latinos experience disproportionately negative consequences of alcohol.

Disparities in consequences related to substance abuse that Latinos face include: HIV/AIDS (NIDA, 2004); incarceration (Iguchi et al., 2002; Iguchi et al., 2005); higher rates of alcohol-related problems including driving under the influence (Caetano & Clark, 2000); intimate partner violence; and cirrhosis mortality (Caetano, 2003; Montoya, 2001).

Increased time in the U.S. has been associated with rises in alcohol use among Latino immigrants.

Undocumented immigrants have been found to be particularly vulnerable to problematic alcohol use behaviors.

AIMS

This retrospective cohort study compares changes in pre- to post-immigration alcohol use trajectories among recent Latino immigrants. Undocumented immigrants were hypothesized to have higher rates of alcohol use before and after immigration. An overall increase in alcohol use trajectories was expected, with higher increases among undocumented immigrants.

METHOD

Sample

Baseline sample consisted of N=374 Latinos who immigrated to the U.S. less than one year prior to assessment. Retrospective pre-immigration alcohol use data was collected at baseline. Two follow-up assessments (12 months apart) reported on post-immigration alcohol use.

Ages: 18-34 (M age = 26.95, SD = 4.98)

Gender: 51% female, 49% male

Immigrant countries of origin: Cuba (50%), Columbia (20%), Honduras (13%), and Nicaragua (8%), Other (9%)

Documentation Status (at baseline): Documented immigrant (79%), Undocumented immigrant (21%)

Measures

Alcohol use: Frequency and quantity of alcohol use in the past 90 days was measured through the Timeline Followback Interview (Sobell & Sobell, 1992).

- Frequency of alcohol use was calculated by summing the total number of days alcohol was consumed in the 90 day window.

- Quantity of alcohol was calculated by average number of drinks on days that alcohol was consumed in the past 90 days.

Documentation status: Participants were asked to report their current legal status in the U.S. A total of fourteen possible categories were provided. These categories were then recoded into a dichotomous variable of *documented* (1) or *undocumented* (0) immigration status.

Data Analysis

- Growth curve analyses was used to estimate individual trajectories of change and test slope differences in alcohol use between the baseline and the two follow-up assessment time points.

- Gender and immigration documentation status were included as covariates in the research model.

- Structural equation modeling fit indices were used to evaluate the fit of the growth curve models to the data. Following the recommendations of Kline (2005), we evaluated overall model fit using Root Mean Square Error of Approximation (RMSEA; < 0.08), the Comparative Fit Index (CFI; > 0.95), and the standardized root mean square residual (SRMR; < 0.05).
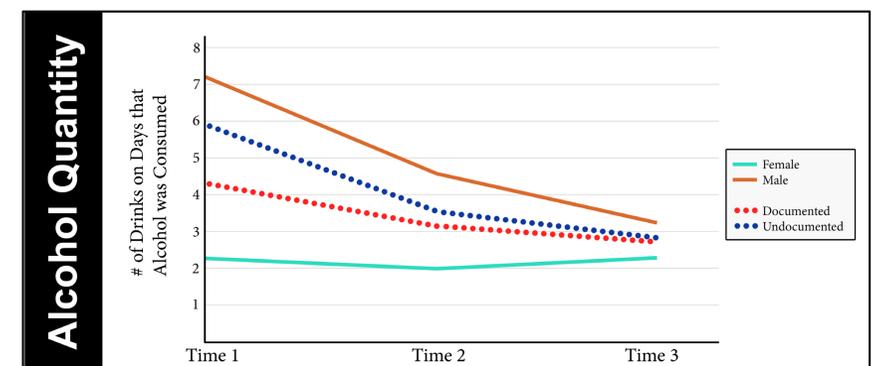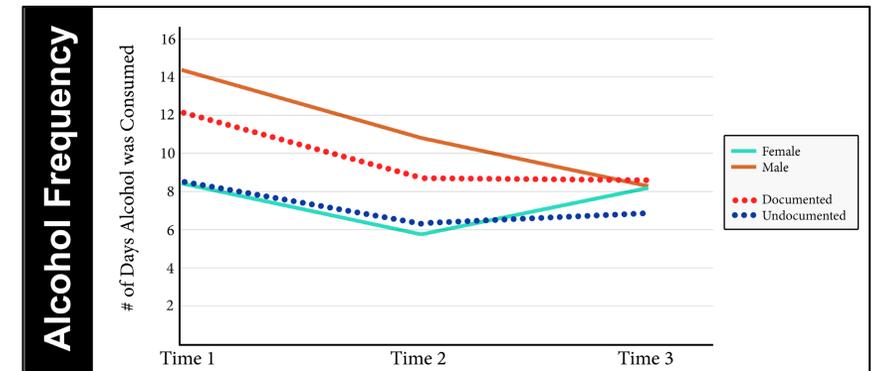
RESULTS

TABLE 1
Growth Curve Model Estimates and Standard Errors

Parameter	Alcohol Quantity Estimate (SE)	Alcohol Frequency Estimate (SE)
Average intercept	1.04 (0.16)**	1.29 (0.26)**
Average slope	-0.10 (0.10)	0.07 (0.17)
Time-invariant covariate		
Gender → Intercept	1.05 (0.13)**	1.21 (0.23) **
Gender → Slope	-0.38 (0.08)**	-0.47 (0.14)*
Time varying covariate		
Doc. status $T_1 \to T_1$ Alcohol Use	0.02 (0.16)	0.67 (0.26)*
Doc. status $T_2 \to T_2$ Alcohol Use	0.11 (0.11)	0.44 (0.18)*
Doc. status $T_3 \to T_3$ Alcohol Use	0.29 (0.14)*	0.55 (0.24) *

Note. * = $p < .05$; **= $p < .01$

CONCLUSIONS

- Growth curve analysis showed revealed no significant differences in the alcohol use trajectories for the overall sample. However, differences by documentation status and gender were found.
- Undocumented immigrants reported lower frequency of alcohol use before and after immigration and lower quantity of alcohol post immigration in comparison to documented immigrants.
- As anticipated, alcohol use was lower among females, relative to males. Significant gender differences in growth curve trajectories revealed males had higher decreases in pre- to post- immigration alcohol use.
- Further research is needed to uncover the underlying factors associated with the alcohol use trajectories of documented and undocumented Latino immigrants.
- This research may inform prediction, prevention, and treatment of problem drinking behaviors among the largest and fastest growing ethnic minority group in the United States: Latinos.