



# **Behaviors Increasing the Risk of Crash Injury in Latino Adolescent Males: The Influence of Acculturation and Parent Connectedness**

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# Background

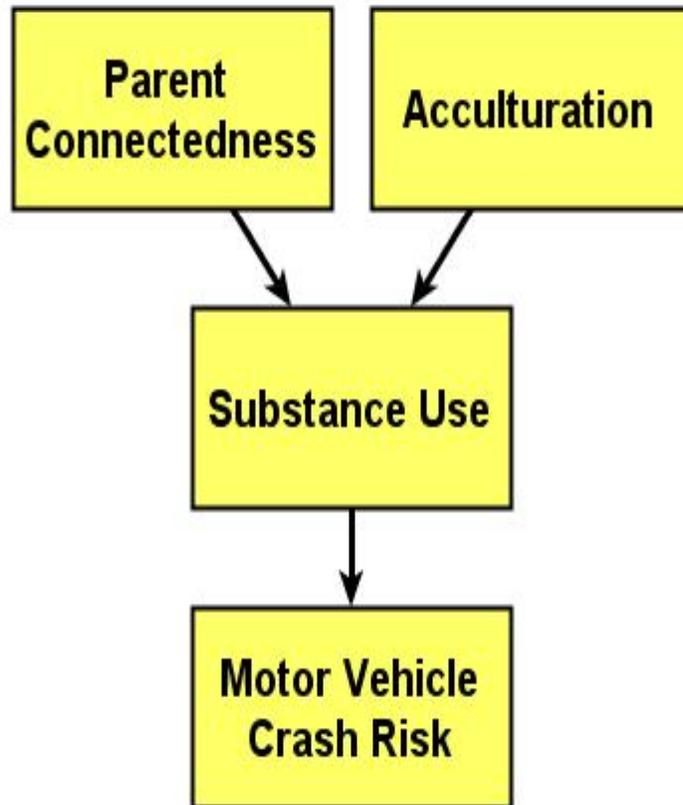


- Motor vehicle crashes (MVC) are the leading cause of death for U.S. teens and cause the largest proportion of mortality among Latino adolescent males.
- February 26, 2013 – GHSA released figures from 2012 showing 19% increase in teen driver deaths.
- Acculturation in U.S. Latino adolescents plays an important role in substance use propensity, and for adolescent drivers, substance use is a known risk factor for a serious or fatal MVC.

Castro, F.G., J.A. Stein, and P.M. Bentler, *Ethnic pride, traditional family values, and acculturation in early cigarette and alcohol use among Latino adolescents.*



# Background



- We sought to assess the effects of acculturation and parent connectedness on behaviors increasing the risk of crash injury in Latino adolescent males.



# Setting/Population



- New Haven is a city in southern Connecticut with a population of approximately 130,000, of which 27% is Latino.
- In 2010, the median household income was \$35,000, compared to \$64,000 in Connecticut as a whole.
- Forty-four percent of children under 18 years of age live in families with incomes below the federal poverty level, compared to 13% in the entire state.
- For Latinos, the median income was \$31,000 and 51% of children under 18 years of age lived in families with incomes below the poverty level.

U.S. Census Bureau Decennial Census.

U.S. Census Bureau American Community Survey.



# Methods



## Sample and Materials

- Latino Males ages 15-18
- Recruited from 10/2011 - 10/2012 in six locations the New Haven, CT community
- Administered a validated acculturation measure, the Short Acculturation Scale for Hispanic Youth (SASH-Y), coupled with a modified youth health behavior risk survey.

## Analysis

- **Acculturation** was assessed by calculating the sum total for each participant of the ten SASH-Y questions.
- **Parent Connectedness** was a binary variable created using the responses to questions regarding attitudes toward family and friends.
- Univariate regression analysis was performed to assess the effects of acculturation and low parent connectedness on engagement of a variety of risk behaviors



# Results



- We enrolled a total of 138 Latino adolescent males with an overall mean age of 16.9 years.
- Males of Puerto Rican descent represented the largest portion of the sample (59.1%).
- The majority of participants were US-born (61.6%), though most had at least one parent that was foreign born (84.1%).
- Few adolescents had a driver's license or permit (10.1%) and many reported unlicensed driving (55.1%).



# Results



## *Acculturation vs. Crash Risk Behaviors*

Variable	Coefficient	p-value
Has ever used Marijuana	0.056	0.021
Use of marijuana in the last 30 days	0.033	0.011
Age of first marijuana use	0.061	0.021
Number of lifetime marijuana uses	0.026	<0.001

## *Low Parent Connectedness vs. Crash Risk Behaviors*

Variable	Coefficient	p-value
Has ever been involved in a MVC	1.497	0.014
Has ever smoked cigarettes	1.968	0.003
Age of first cigarette use	2.043	<0.001
Occasions binge drinking in past year	0.158	0.024
Occasions drinking 5+ drinks in past year	0.170	0.006



# Conclusions



- We show strong relationships between parent connectedness, acculturation, and substance use behaviors placing Latino teen males at increased risk for MVCs.
- Acculturation of study participants was found to be strongly associated with earlier and more frequent marijuana use.
- Low parent connectedness predicted smoking and binge drinking behavior among Latino teen males.



# Discussion



- We demonstrate the importance of family and culture in reducing Latino teen male MVC risk behaviors.
- Further research into the protective effects strong family connections in reducing Latino teen MVC risk is needed.



# Discussion



## Limitations

- Single, Northeastern city
- Latino population distinct from other regions of the US
- Various measures of acculturation available
- Parent connectedness measure not validated
- Univariate analysis

## Future Directions

- Multivariate analysis
- Collected daily diaries from study participants reporting driving/riding behaviors and family interactions



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  - Wilbur Cross High School