Acculturation and Tobacco Prevention in Latino Populations: Correcting Health Disparities

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This Presentation

- Discuss the role of acculturation as a predictor of tobacco use trajectory among adolescents and emergent adults in Los Angeles’ Latino population
- Present key findings from project RED – our latest research
- Describe interdisciplinary partnerships – potential for Psychology to help correct disparities
Tobacco Related Disparities: Avoidable and Unfair Health Burden

Figure 3.4 The purpose of public health is to reduce the effort required from an individual to overcome health burdens.

Source: Graphic by Bobby Milstein. Used with permission.

Source: Healthy Communities
Tobacco use

- Tobacco use is initiated in some groups as early as age 12. “As with most forms of substance use, smoking rises to a peak prevalence in the age period of 18–25 years, but unlike other forms of substance use, which decline after the mid-20s, smoking is more persistent”.

Source: Laurie Chassin, Patrick J. Curran, Clark C. Presson, Steven J. Sherman, and R. J. Wirth
Tobacco Disparities Occur Along the Tobacco Use Trajectory Continuum in Adolescence and Emerging Adulthood

<table>
<thead>
<tr>
<th>Exposures and Risk</th>
<th>Exploration of tobacco</th>
<th>Initiation of use</th>
<th>Progression to addiction</th>
<th>Tolerance</th>
<th>Impaired control</th>
<th>Quit attempts and cessation</th>
<th>Withdrawal symptoms</th>
<th>Dependency (DSM IV criteria)</th>
<th>Pharmacological Treatments</th>
</tr>
</thead>
</table>

Keck School of Medicine of USC  Modified - Richardson, 2012, Health Disparities and the Tobacco Continuum
### Prevalence of Tobacco Use among Hispanic/Latinos By Subethnic Group and Tobacco Use in the U.S.

<table>
<thead>
<tr>
<th>Puerto Ricans in Mainland U.S.</th>
<th>Puerto Ricans in Puerto Rico</th>
<th>Mexican American – U.S. born</th>
<th>Mexican Immigrants</th>
<th>Central/South Americans</th>
<th>Cuban American</th>
<th>Dominicans</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.6%</td>
<td>10.6%</td>
<td>20.1%</td>
<td>11.6%</td>
<td>12.8%</td>
<td>21.5%</td>
<td>10.7%</td>
</tr>
</tbody>
</table>

- Data is 2008 from CDC - U.S. Smoking Prevalence Varies Widely by State and Territory Only Utah, Puerto Rico, and U.S. Virgin Islands have met Healthy People 2010 goal, Publish date: Nov 5, 2010
Adolescent Tobacco Use

- In 2011, 18% of 12-to-17-years old in the U.S. reported using tobacco in the last 30 days.\textsuperscript{1}

- Nationally, current tobacco use is higher among Hispanic (17.5%) and White (20.3%) youth than among African American (10.5%) youth.\textsuperscript{1}
Hispanic/Latinos (H/L) and Tobacco Use

- U.S. smoking prevalence for H/L adults is 12.5% vs. 21.0% for Whites
- U.S. born smoke at higher levels than the foreign born (19.1% vs 11%)
- Initiation among Latinos occurs before age 18
- Puerto Ricans and Cuban Americans are more likely to be heavy smokers than other Hispanic/Latinos.
- Hispanic/Latinos tend to be low level intermittent smokers

Seeking help in quitting Using Quitlines

- African-American smokers significantly more likely to call the CA Helpline (quitline) than Whites
- CKV (Chinese, Korean, Vietnamese) smokers using three in-language lines of the CA Smokers Helpline were significantly more likely to call the quitline than Whites (p<.05)
- English-speaking Asians were significantly less likely to call the quitline compared to white smokers (p<.05)
- Compared to men, women calling the helpline are less educated, more likely to be unemployed, and have lower household income.
- Despite their low SES, women are more likely to use pharmacotherapy before calling the helpline
- Alaska Natives state satisfaction with quitlines would improve if additional forms of NRT and other cessation services (face-to-face counseling and peer-to-peer groups) are offered.
Acculturation

- Acculturation is the process of adaptation into a new host culture.

- It is thought to be multidimensional, with individuals who are bicultural being able to switch back and forth across cultures without any problem.
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Acculturation

- Along the spectrum, individuals can be
  - Traditional (holds on strongly to original values)
  - Bicultural (embraces values in both cultures)
  - Assimilated (embraces mostly the host country’s value system)
Among Hispanics, acculturation to the United States culture has been associated with an increased risk for smoking, whereas retention of the culture of origin has been found to be protective against smoking.
• Ethnic identity
• Some studies have found that a well-developed Hispanic ethnic identity is protective against substance use, whereas others have implicated it as a risk factor.
DEPRESSION

• Depression is associated with tobacco use among adolescents with various descriptions of directionality, i.e. depression leads to smoking or smoking leads to depression.³

• Nationally, depression is more prevalent among Hispanic (33%) than White (27%) and Black (25%) youth.¹
The Current Study

- This is a longitudinal cohort study funded by NIDA that began in Fall of 2005.
- Students in 7 Los Angeles high schools completed surveys in 9th, 10th, and 11th grade (N=2722 with data at at least one time point).
N=1303 Hispanic participants from our original high school cohort completed a follow-up survey in 2011.

We hypothesized that depression, U.S. acculturation, low Hispanic acculturation, and low ethnic identity in high school would be associated with increases in tobacco use in from high school to young adulthood.
Methods

• We attempted to contact all Hispanic students from our original high school cohort to participate, (N=2722). Of those, 2151 participants had valid contact information. A total of 1303 (61%) provided verbal consent and participated in our emerging adulthood survey.
MEASURES

- Depression was assessed using the Center for Epidemiologic Studies Depression (CES-D) scale.
- U.S. and Hispanic acculturation were assessed with a short form of the ARSMA-II scale (Cuellar).
- Ethnic identity was assessed with the MEIM (Phinney).
MEASURES

- Tobacco use was operationalized as the number of days in the past month on which the respondent smoked.
ANALYSES

• analyses were performed to determine the associations between (depression, acculturation, and ethnic identity) and smoking trajectories, controlling for demographic covariates.
RESULTS

Respondent characteristics

• Mean age=14
• 53% female
• 62% 2\textsuperscript{nd} generation
Tobacco Use

Tobacco Use (past 30 days)

9th grade: 8%
10th grade: 9%
11th grade: 11%
Emerging adults: 27%

4/10/2013
RESULTS

Between-subjects effects:

• Depression was a risk factor for smoking.
• Ethnic identity was protective against smoking.
RESULTS

Within-subjects effects:

• Hispanic acculturation predicted slower increase in smoking over time.
Past Month Smoking and Depression: Adolescence to Emerging Adulthood

Log of days smoked in past month

- Low depression
- High depression

9th 10th 11th EA

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Past Month Smoking and Acculturation: Adolescence to Emerging Adulthood

- Low Hispanic acculturation
- High Hispanic acculturation

Log of days smoked in past month

9th  10th  11th  EA
Past Month Smoking and Ethnic Identity: Adolescence to Emerging Adulthood

- Low ethnic identity
- High ethnic identity

Log of days smoked in past month

9th 10th 11th EA

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Conclusion

- Depression, Hispanic acculturation, and ethnic identity in adolescence are significantly associated with trajectories of tobacco use through emerging adulthood.
Acculturation

• Association between Hispanic acculturation and smoking was small in high school, but those with higher Hispanic acculturation experienced a smaller increase in smoking in young adulthood.
Ethnic Identity

- Ethnic identity had a consistently protective effect against smoking.
- These findings are consistent with literature on acculturation and substance use among Hispanic adolescents. They also indicate that cultural and psychological characteristics in adolescence can have long-lasting effects on smoking trajectories through emerging adulthood.
Depression

• Non-depressed youth reported lower levels of tobacco use in high school than their depressed peers, but this effect decreased over time.
Conclusion

• Our findings highlight the precipitous increase in tobacco use in emerging adulthood.
• These findings underscore the importance of addressing tobacco prevention in emerging adulthood among Hispanic adolescents.
A better understanding of Hispanic adolescent depression, acculturation, and ethnic identity is important for tailoring intervention for Hispanic emerging adults.
Future Directions

• More tobacco prevention efforts are needed for Latino young adults, across different levels of acculturation, and ethnic identity.

• Strategies for prevention programs should include mechanisms that address acculturation, ethnic identity and depression among Latino young adults.
Thank YOU
Acknowledgements

PROJECT RED

• Jennifer Unger, PhD
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• NIDA
National Latino Tobacco Control Network

- NLTCN (Indiana Latino Institute) (Jeannette Noltenius, PhD)
- Other CDC funded networks
- National effort focus on lessons learned and best practices shared across various ethnic and sexual minorities, those with Low SES, and other vulnerable populations, and the medically underserved

- http://www.tobaccopreventionnetworks.org
CALIFORNIANS OF COLOR

“No Community Left Behind”
ADVOCACY AND DATA DISSEMINATION PROJECT TO ACHIEVE EQUITY FOR PRIORITY POPULATIONS ON TOBACCO
Tobacco Related Disease Research Program (TRDRP)

Asian Pacific Partners for Empowerment, Advocacy and Leadership, African American Tobacco Control Leadership Council, Coalition of Lavender-Americans on Smoking and Health, LGBT Community Council (CLASH), Break Free Alliance, National Latino Tobacco Control Network at USC
Tobacco Research Network on Disparities (TREND)
National Cancer Institute

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23 Universities and Research Centers around the country
www.tobaccodisparities.org
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