



Correlates Associated with Past 30 Day Smoking in a Predominantly Mexican American Young Adult Sample

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Introduction

Background

- Smoking is the primary preventable cause of death and disease in the United States (CDC, 2018).
- Tobacco use is linked to health concerns such as cardiovascular and respiratory diseases, early mortality, and several types of cancer, most notably lung cancer (CDC, 2016).
- Furthermore, the Hispanic population is the fastest, and largest growing population in the U.S (Woolard et al., 2014).
- The percentage of Hispanics adults 18 years or older who smoke is 11%, approximately 4.1 million (CDC, 2016).
- An inverse association between education and cigarette smoking has been assessed, and an association of certain demographics with substance abuse (Sabado et al., 2017)
- Studies suggest that even though Hispanics binge drink less frequently as compared to non-Hispanic whites, they still binge drink at the same intensity (Woolard et al., 2015) .
- Although current literature on tobacco use is extensive, less research focuses on Hispanic young adults and smoking (Kaplan et. al., 2014).

Aim

The aim of the study is to identify potential demographic, psychosocial, and other substance use correlates of past in Hispanic young adults.

Methods

Participants

The present sample ($n = 725$) represents a subset of Hispanic participants from a larger dataset ($N = 1013$) collected via an online survey. See **Table 1 and 2** for further participant characteristics.

Measures

Sociodemographics. This questionnaire collected typical sociodemographic information (e.g., age, sex, education).

Tobacco use history. This survey assessed past and current tobacco use (e.g., intermittent vs. daily) with a focus on past 30-day use. This survey has been used in previous studies on the U.S./Mexico border (e.g., Cooper et al., 2011).

Daily Drinking Questionnaire (DDQ). The DDQ assessed past 90 days drinking behavior (e.g., frequency/rate, time spent drinking; Collins, Parks, & Marlatt, 1985).

Stressors/worries. This 12-item Likert type scale assessed common stressors/worries (e.g., school grades) that may be experienced by young adults in the past six months. This survey has been used previously in similar studies (Berg et al., 2011).

Social Activities. This 7-item Likert type scale assessed past six month engagement in social activities (Berg et al., 2011). This survey has been used in previous studies on the U.S. Mexico border (e.g., Cabriaes et al., 2016)

Acculturation Scale for Mexican Americans-II (ARSMA-II). This 30-item two subset scale (Anglo Orientation Subscale {AOS} and a Mexican Orientation Subscale {MOS}), assessed levels of acculturation and enculturation using an orthogonal or multidimensional approach (Cuellar et al., 1995)

Note: Cronbach's alpha ranging from .65 to .91 were observed across the measures used in this study, indicating moderate to satisfactory levels of reliability.

Methods (continued)

Procedure

University IRB approval was obtained prior to study implementation. Participants were recruited through traditional (e.g., traditional radio, flyers) and digital (e.g., social media, bulletin boards) methods and incentivized by entering a gift card drawing at the end of the study (chance to win one of twenty \$100 gift cards). Participants read and electronically signed the consent form before proceeding with the online survey. Information collected in the consent form was not linked to survey responses.

Approach to Analyses

A logistic regression (0 = no, 1 = yes; Nagelkerke $R^2 = 20\%$) assessed sociodemographic, and psychosocial/health correlates of binge drinking. Binge drinking was defined as any past 30 day use .

Results

Fifteen percent of participants reported past 30 day smoking, 47.7% reported drinking alcohol in the past 90 days, 44.1% reported lifetime binge drinking, and 25% reported past 30 day binge drinking. A logistic regression (0 = no, 1 = yes; Nagelkerke $R^2 = 20\%$) assessed sociodemographic and psychosocial/health correlates of smoking (1 cigarette in past 30 days). Correlates associated with higher odds of past 30 day smoking were: education (High School/GED diploma compared with graduate coursework, marginally; OR = 4.24, CI [0.97, 18.55]), income level (less than \$15,000 compared with > \$50,000; OR = 2.73, CI [1.16, 6.39]), and past 30 day binge drinking OR = 4.19, CI [2.40, 7.31].

	Percent
Female	71.9
Mexican American	60.0
Education	
< High school	2.20
High school/GED	14.30
Some college	67.70
Graduate Coursework	10.10
Past 30 day smoking	50.8

	Range	M	SD
Age	18-30	21.40	2.96
Stress	1-4	2.31	0.52
Social activities	1-4	2.35	0.63
Social support	1-7	5.48	1.24
Coping style	1-5	2.24	0.48
Sensation seeking	1-5	3.61	0.76

	OR	CI(lower)	CI(upper)
Education	4.24	0.97	18.55
Income Level	2.73	1.16	6.39
Drinking	4.19	2.40	7.31

Notes. Variables within the table, $p < .05$. Nagelkerke $R^2 = .193$

Discussion

The findings are consistent with the literature indicating that education, income level, and past 30 day binge drinking are associated with smoking and extend them to show these associations in Hispanic young adult smokers (CDC, 2016). Lower income was again associated with increased smoking in this group, suggesting the continued assessment of income and other related factors such as access to education about the consequences of smoking and opportunities to find ways to quit smoking (Cooper, 2011). Lower education was associated with greater smoking, suggesting that education may be a protective factor against smoking, and that the university environment, for example, may provide fewer social opportunities to smoke and greater access to prevention and cessation programs (Sabado et al., 2017). Finally, the strong association observed here between smoking and drinking suggests that polysubstance use remains assessed in future studies and that factors associated with smoking and drinking such as mood, peer group, perceived discrimination, and perceived positive and negative consequences associated with use are also assessed (Gubner et al., 2017). Limitations include: the study was a cross-sectional design, the correlational nature, and its reliance of self-report. The strengths include the assessment of an all Hispanic, primarily Mexican American sample, and the inclusion of the more novel cultural constructs associated with smoking. Future studies should continue to assess these relationships in Hispanic young adults, keeping in mind while doing so that more nuanced characteristics relative to other ethnocultural groups are included such as education about smoking consequences, access to prevention and cessation programs, and factors related to polysubstance use.

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Acknowledgements
This study was funded by A Smoke Free Paso Del Norte