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## Cultural Values Associated with Substance Use among Hispanic Emerging Adults in Southern California

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### Abstract

**Introduction**—Hispanic emerging adults are a priority population for substance use prevention, yet few studies have examined whether traditional Hispanic cultural values serve as risk or protective factors for substance use among emerging adults. This study examined the relationship between familism, respeto, fatalism, and substance use among Hispanic emerging adults.

**Methods**—Participants (ages 18 to 25) completed surveys indicating identification with familism, respeto, and fatalism, past month use of tobacco, marijuana, hard drugs and binge drinking. Separate logistic regression models examined the association between cultural values and each substance use outcome, controlling for acculturation, age and gender.

**Results**—Among participants (n = 1445, mean age = 23, 60% female), 21% reported past month cigarette use, 18% reported past month alternative tobacco product (ATP) use, 25% reported past month marijuana use, 44% reported past month binge drinking, and 7% reported past month hard drug use. Higher fatalism scores were associated with increased ATP use. Higher familism scores were associated with binge drinking, while higher respeto scores were associated with decreased binge drinking, marijuana, and hard drug use.

**Conclusion**—These findings suggest that substance use prevention and intervention programs should emphasize how substance use interferes with caring and honoring parents (respeto) and family cohesion and functioning (familism). Programs that highlight these cultural values and beliefs may be beneficial for Hispanic emerging adults and members of other collectivistic cultures.

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#### Author Disclosure

##### Contributors

Patricia Escobedo and Jon-Patrick Allem designed the concept of the study. Patricia Escobedo was responsible for the analysis, interpretation of data and drafted the first version of the manuscript. Jon-Patrick Allem, Jennifer B. Unger, and Lourdes Baezconde-Garbanati provided critical revisions of the manuscript, and approved the final manuscript.

##### Conflict of Interest

All authors of this article declare they have no conflicts of interest.

## Keywords

Young Adult; Emerging adults; Hispanics; Culture; Substance use

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## 1. Introduction

Emerging adulthood is a transitional period between the ages of 18 to 25, characterized by identity exploration, change, and experimentation.<sup>1</sup> Substance use, including tobacco use, binge drinking, marijuana, and illicit drug use is more prevalent among emerging adults than any other age group.<sup>2</sup> Substance use among emerging adults varies by ethnicity,<sup>3</sup> and Hispanic emerging adults have been identified as a priority population for substance use prevention.<sup>4–5</sup> Previous research indicates that Hispanic emerging adults were more likely to be single and dual tobacco product users compared to their White and African-American counterparts.<sup>6</sup> Moreover, a nationally representative sample of emerging adults revealed that Hispanic respondents were more likely to binge drink compared to their African-American and Asian counterparts, while nearly 30% of Hispanic emerging adults reported using marijuana during the past year, and 35% reported using illicit drugs during the past year.<sup>3</sup>

Several recent studies supported an association between ethnicity and substance use among emerging adults, however, to prevent substance use among Hispanic emerging adults in particular, researchers must consider how culturally-related values and beliefs make this group more or less vulnerable to substance use.<sup>5</sup> Few studies have examined whether traditional Hispanic cultural values can serve as risk or protective factors of substance use among emerging adults.

Cultural values previously identified to be associated with substance use among Hispanic emerging adults include *familism*, which emphasizes respect, fidelity and interdependence among nuclear and extended family networks,<sup>7–8</sup> and *respeto*, showing deferential treatment to family members and others based on age and status.<sup>9</sup> *Respeto* also stresses that children are expected to obey, respect, and care for their parents.<sup>5</sup> Fatalism, a culturally related belief that life outcomes are predetermined and individuals have little control over life events, including health outcomes, is also related to substance use among this priority population.<sup>10</sup>

Prior research on Hispanic emerging adults indicated that familism was protective against smoking,<sup>11</sup> and alcohol misuse.<sup>12–13</sup> It is unknown, however, whether familism, *respeto* and fatalism are associated with multiple substance use outcomes among Hispanic emerging adults.<sup>14</sup> Previous studies on Hispanic emerging adults have focused on cigarette use but have ignored alternative tobacco products (ATP) (e.g., cigarettes, cigars, chewing tobacco, and snuff),<sup>15</sup> as an outcome, which is troublesome as Hispanics emerging adults reported higher rates of ATP use compared to African Americans and Asian Americans.<sup>2</sup> Research examining how cultural values and beliefs are associated with both traditional and alternative tobacco products is needed. This study aims to fill this gap in the literature.

Based on previous studies examining the association between Hispanic cultural values and substance use among emerging adults,<sup>11–13</sup> we hypothesized that familism and *respeto* will be negatively associated with substance use, while fatalism will be positively associated with

substance use. Findings should further the discussion on the role of traditional cultural values and beliefs on substance use among Hispanic emerging adults and inform prevention and intervention programs in the future.

## 2. Materials and Methods

### Participants and Data Collection

Surveys were completed by individuals participating in Project RED (Reteniendo y Entendiendo Diversidad para Salud) a longitudinal study of substance use among Hispanics in Southern California.<sup>16</sup> Participants first joined the study as ninth graders from seven participating high schools in the Los Angeles area during 2005. High schools were invited to participate if at least 70% of students were Hispanic. Parental consent and student assent was required for participation. All surveys in the 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade were administered by trained research investigators at the high schools. Details of school and student recruitment process can be found elsewhere.<sup>16</sup> Participants from the original high school cohort who self-identified as Hispanic were invited to participate in the study as emerging adults. In 2010 eligible participants were sent letters inviting them to visit a website or call a toll-free number to participate in the study using contact information they provided in high school. If participants could not be reached by mail, trained research investigators used publically available online search engines and social media websites to contact and invite participants. Participants who visited the website completed an online survey and trained research staff conducted the phone interviews. Participants providing consent were surveyed annually from 2010 to 2014. Details about the emerging adult recruitment process can be found elsewhere.<sup>17</sup> This study used data from 2013 to 2014 from this longitudinal study, the first year all pertinent measures were available. Participants with complete data served as the sample of emerging adults. The university's Institutional Review Board approved all procedures.

### Measures

The scale, corresponding reliability coefficient and questions are as follows: *Familism* (Cronbach's alpha [ $\alpha$ ] =0.71) was assessed using a four item scale,<sup>18</sup> asking participants "If one of my relatives needed a place to stay for a few months, my family would let them stay with us", "I expect my relatives to help me when I need them", "When a family makes an important decision, they should talk about it with their close relatives", "If anyone in my family needed help, we would all be there to help them". Responses were coded "Definitely Not," = 1 "Probably Not" = 2 "Probably Yes" = 3 and "Definitely Yes" = 4. Composite scores were created by averaging item responses together to form single composite score. *Respeto* ( $\alpha$  =0.82) was assessed using a four item scale,<sup>18</sup> asking participants "I will take care of my parents when they are old", "It is important to honor my parents", "It is important to respect my parents", "I want to be a good person so that people know that my parents raised me right". Responses were coded "Definitely Not," = 1 "Probably Not" = 2 "Probably Yes" = 3 and "Definitely Yes" = 4. Composite scores were created by averaging item responses together to form single composite score. *Fatalism* ( $\alpha$  =0.78) was assessed using a four-item scale adopted from previous literature,<sup>19</sup> asking participants "It's more important to enjoy life now than to plan for the future", "People can't really do much to change what

happens in life. You just have to accept things”, “I live for today because I don’t know what will happen in the future”; and “I don’t plan ahead because most things in life are a matter of luck”. Responses were coded “Definitely Not,” = 1 “Probably Not” = 2 “Probably Yes” = 3 and “Definitely Yes” = 4. Composite scores were created by averaging item responses together to form single composite score.

Past-month cigarette use was dichotomized with “1” indicating any use. Past-month ATP use was dichotomized with “1” indicating any use of one of eight products: flavored little cigars, cigars, chewing tobacco, clove cigarettes, tobacco from a hookah or a waterpipe, snus, dissolvable tobacco, or electronic cigarettes.<sup>20</sup> Past-month marijuana use was dichotomized with “1” indicating any use. Past-month binge drinking (having 5 or more drinks in a row) was dichotomized with “1” indicating any binge drinking activity. Past-month hard drug use was dichotomized with “1” indicating any use of at least one of five illicit substances: cocaine, methamphetamine, ecstasy, hallucinogens, and inhalants.<sup>21</sup>

### Analysis Plan

Assumptions of logistic regression were assessed by conducting the appropriate diagnostics and determined to be satisfied. To examine the relationship between substance use and familism, respeto and fatalism, each substance use outcome was regressed on the cultural values and fatalism scores, controlling for acculturation,<sup>18</sup> age and gender. Previous research indicates that acculturation,<sup>22–23</sup> age,<sup>17</sup> and gender<sup>24–25</sup> may influence substance use among Hispanic emerging adults, and should be controlled for in analyses. For all analyses, quantities of interest were calculated using the estimates from each multivariable analysis by simulation using 1,000 randomly drawn sets of estimates from a sampling distribution with mean equal to the maximum likelihood point estimates and variance equal to the variance covariance matrix of the estimates, with covariates held at their mean values.<sup>26</sup> For all analyses,  $p < .05$  were considered significant, while  $p < .05$  and  $p < .07$  indicated marginal statistical significance. Statistical analysis was performed using Stata (version 14, StataCorp LP, College Station, Texas).

### 3. Results

Among the participants, 60% were female, the average age was 23, 21% of participants reported past month cigarette use, 18% reported past month ATP use, 25% reported past month marijuana use, 44% reported past month binge drinking, and 7% reported past month hard drug use (Table 1).

Participants with higher familism scores were less likely to report cigarette use, but this association was only marginally statistically significant ( $p=0.07$ ). Participants with higher fatalistic scores were more likely to report past month ATP use (Figure 1A). A difference in score on the fatalism subscale between the 10th percentile and the 90th percentile was associated with a 9% (95% Confidence Interval [CI], 3 to 14) higher probability of ATP use. No other associations were statistically significant for cigarette or ATP use.

Participants with higher familism scores were more likely to report binge drinking. A difference in score on the familism measure between the 10th percentile and the 90th

percentile was associated with an 8% (95% CI, 0.7 to 15) higher probability of binge drinking (Figure 1B). Participants with higher respeto scores were less likely to report past month binge drinking. A difference in score on the respeto measure between the 10th percentile and the 90th percentile was associated with a -7% (95% CI, -13 to -0.8) lower probability of binge drinking. No other associations were statistically significant for binge drinking.

Participants with higher respeto scores were less likely to report use of marijuana. A difference in score on the respeto measure between the 10th percentile and the 90th percentile was associated with a -7% (95% CI, -12 to -1) lower probability of marijuana use. No other associations were statistically significant for marijuana. Participants with higher respeto scores were less likely to report hard drug use (Figure 2). A difference in score on the respeto measure between the 10th percentile and the 90th percentile was associated with a -2% (95% CI, -5 to -0.2) lower probability of hard drug use.

#### 4. Discussion

The present findings suggest that cultural values and beliefs are associated with substance use among Hispanic emerging adults. Respeto was protective against binge drinking, marijuana use, and hard drug use. This finding is similar to earlier studies among Hispanic adolescents demonstrating that respeto was a protective factor against substance use.<sup>27</sup> Hispanic emerging adults and adolescents who place a high value on honoring their parents may heed warnings from family and authority figures about the dangers of substance use.<sup>28</sup> Prevention programs could focus on the family and foster communication between parents and children at any age in order to deter substance use.

Familism was found to be a risk factor for binge drinking, contradicting our original hypothesis. This finding is inconsistent with previous studies which found that familism was protective against heavy alcohol use among Hispanic emerging adults,<sup>11,13</sup> but consistent with an earlier study examining this relationship among Hispanic adolescents.<sup>27</sup> It may be that Hispanic emerging adults who value family interdependence may remain at home or close to home during emerging adulthood and continue to associate with peers and family members who misuse alcohol. When alcohol is consumed at familial gatherings with family members, binge drinking or alcohol use may not be perceived as a problematic behavior, especially during emerging adulthood, a time when increased substance use is often condoned.<sup>29</sup> Additional research is needed to clarify the relationship between familism and substance use among Hispanic emerging adults.

ATP use, which included flavored little cigars, cigars, chewing tobacco, hookah, and electronic cigarettes, was associated with fatalistic beliefs. An earlier study demonstrated an association between fatalism and cigarette smoking among Hispanic adolescents<sup>16</sup> but this study did not include other tobacco products. A study examining fatalistic attitudes among adult smokers found that interest in reduced-exposure tobacco products, such as dissolvable tobacco products, was highest among smokers who reported more fatalistic attitudes toward their cancer risk.<sup>30</sup> It was posited that those most interested in reduced-exposure products were discouraged smokers who have not been able to successfully quit cigarette use, which

increased pessimistic attitudes about health outcomes.<sup>30</sup> More research examining the relationship between fatalism and substance among Hispanic populations is needed given that prevention and intervention programs could help individuals maximize the degree to which they believe that health can be influenced and driven by internal factors and one's own actions.<sup>31</sup>

### Limitations

All measures were assessed at a single time point in emerging adulthood, therefore distinctions regarding temporal order cannot be made. Measures also relied on self-report. Outcomes were dichotomous, which did not allow for an understanding of substance use frequency during the past month, but were similar to prior research on substance use among Hispanic emerging adults.<sup>20</sup> The study was limited to Hispanic emerging adults in Southern California and results may not generalize to Hispanic emerging adults living in other regions of the United States or other ethnic groups. Though familism and respeto are regarded as core Hispanic cultural values and fatalism is regarded as a culturally relevant belief among Hispanic populations, they may not be representative of all possible cultural values experienced by Hispanic emerging adults.

### Conclusions

Despite these limitations, these findings suggest that substance use prevention and intervention programs should emphasize how substance use interferes with caring and honoring parents (respeto) and family cohesion and functioning (familism). Programs that highlight these cultural values may be beneficial for Hispanic emerging adults and members of other collectivistic cultures.

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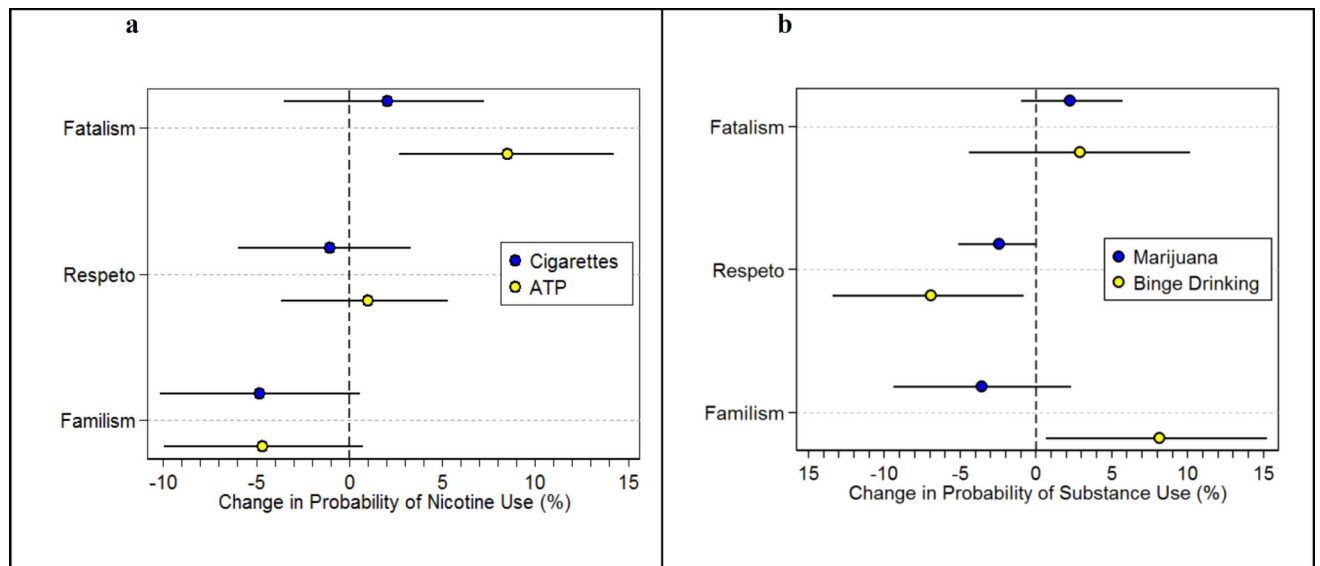
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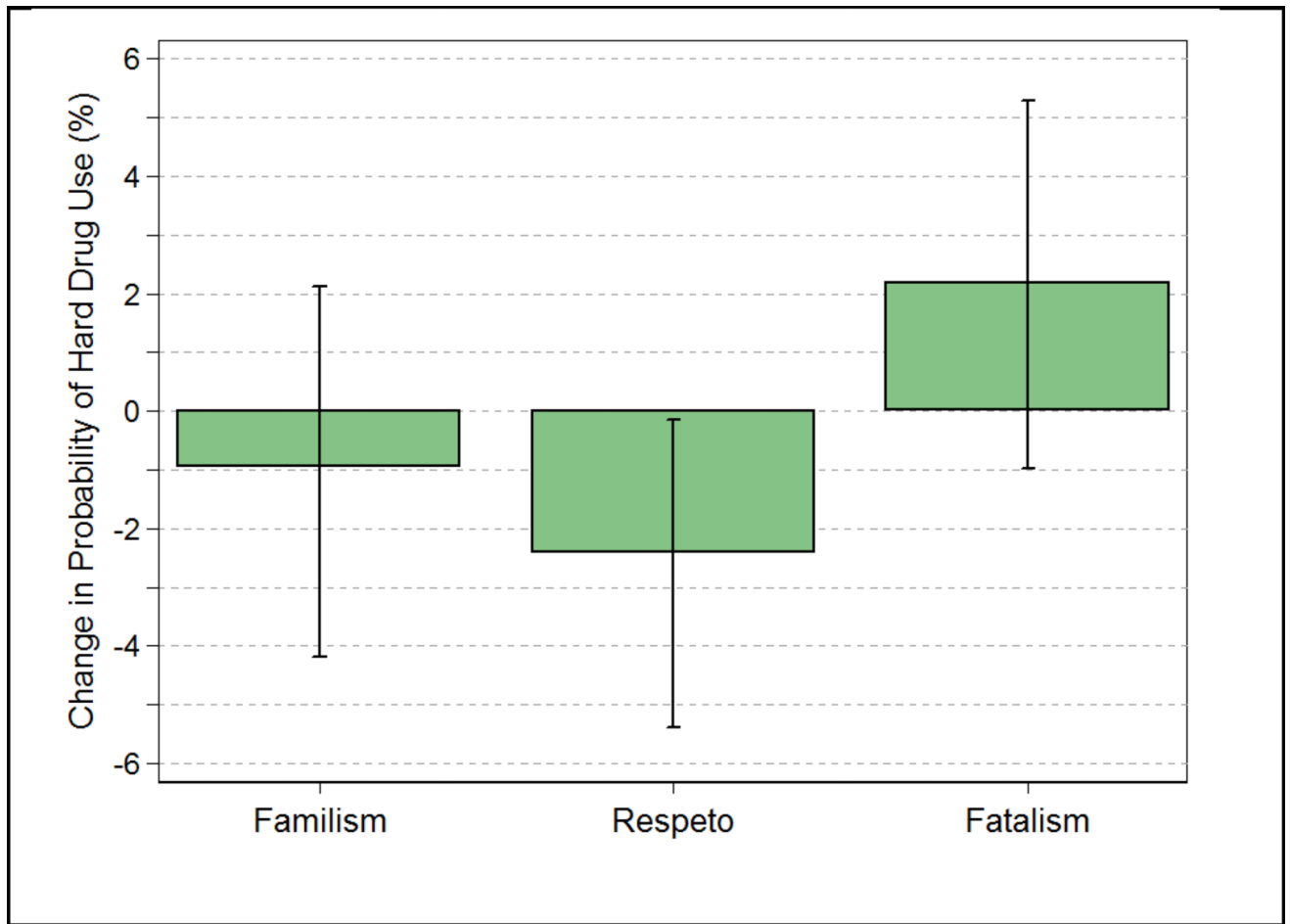
### Highlights

- Hispanic cultural values influenced substance use outcomes among emerging adults.
- Higher fatalism scores associated with alternative tobacco product use.
- Higher familism scores associated with binge drinking.
- Respeto scores associated with less binge drinking, marijuana and hard drug use.
- Substance use prevention programs should emphasize role of cultural values.



**Figure 1. Hispanic cultural variables and substance use**

(A) shows the difference in predicted probabilities of past-month cigarette use, and past-month alternative tobacco product use, when the 10th and 90th percentile Hispanic cultural variables scores are included in computations holding covariates at their mean values. (B) Shows the change in predicted probability of past-month marijuana use and binge drinking, with 95% confidence intervals. An overlapping confidence interval with zero indicates a null result with  $\alpha = .05$ .



**Figure 2.** **Hispanic cultural variables and substance use** shows the change in predicted probability of past-month hard drug use with 95% confidence intervals. For all figures the difference represents the effect of differences of each cultural measure on each outcome, given the empirical estimates of the logistic regression. An overlapping confidence interval with zero indicates a null result with  $\alpha = .05$ .

**Table 1**

## Sample characteristics

	Mean	SD	N
Age	23.14	.37	1445
Female	.60	.49	1445
Past 30 day cigarette use	.21	.40	1417
Past 30 day ATP use	.18	.38	1408
Past 30 day marijuana use	.25	.43	1393
Past 30 day binge drinking	.44	.49	1412
Past 30 day hard drug use	.07	.25	1399
Familism	3.35	.55	1312
Respeto	3.81	.37	1326
Fatalism	2.51	.77	1313

Note: Brief demographic and prevalence characteristics of sample. Numbers in cells are means, associated standard deviations (SD), and useful sample size for each concept.