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Discrimination, drugs, and alcohol among Latina/os in Brooklyn, New York: Differences by gender

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Abstract

BACKGROUND—Based on a stress-coping framework, the present study investigates the relationship between discrimination and substance use, and the moderating effects of gender.

METHODS—This cross-sectional study analyzes data from Latina/o young adults aged 18 to 25 (n=401) from Brooklyn, New York. Multinomial logistic regression was used to test the association between discrimination and substance use.

RESULTS—Discrimination was significantly associated with increased odds of substance use adjusting for covariates (e.g. age, education). Gender was a moderator. Discrimination was associated with *increased* risk of alcohol/marijuana and hard drug use among young Latina women. However, discrimination was associated with *decreased* risk of alcohol/marijuana use and *increased* risk of hard drug use among young Latino men.

CONCLUSION—These findings suggest that discrimination is generally associated with risk for substance use, but further that the outcomes vary by gender. Future research should explore gender-specific dimensions of discrimination and their associations with other outcomes.

Keywords

Latinos; Hispanics; discrimination; alcohol use; drug use; substance use

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INTRODUCTION

The stress-coping model of addiction posits that people use substances to allay stressors (Gil, Wagner, & Vega, 2000; Shiffman & Wills, 1985; Wagner, Myers, & McIninch, 1999). Consistent with this model, studies show that substance use can increase positive feelings, such as euphoria, and decrease negative feelings, such as anxiety (Boardman, Finch, Ellison, Williams, & Jackson, 2001; Gil, et al., 2000; Shiffman & Wills, 1985; Wagner, et al., 1999). Recent studies find that experiences of racial, gender, and other forms of discrimination are stressful (Williams, Yan Yu, Jackson, & Anderson, 1997). Consistent with this theory, several studies have documented that individuals may use alcohol and drugs to cope with the stress related to discrimination (Borrell, et al., 2007). Discrimination is related to substance use among occupation groups, such as bus drivers (Yen, Ragland, Greiner, & Fisher, 1999), and among racial/ethnic groups, including Native Americans (Whitbeck, Hoyt, McMorris, Chen, & Stubben, 2001), African Americans (Borrell, et al., 2007; Martin, Tuch, & Roman, 2003; Yen, et al., 1999), Whites (Borrell, et al., 2007), and Asian Americans (Chae, et al., 2008; Gee, Delva, & Takeuchi, 2007; Yoo, Gee, Lowthrop, & Robertson, 2009).

While several studies have assessed the effects of discrimination on health outcomes among Latina/os (Araújo & Borrell, 2006; Lee & Ahn, 2012), few studies assessing the relationship between discrimination and substance use have been conducted with Latina/o populations (The term “Latina/o” will be used to refer to both Latina women and Latino men). Discrimination has been associated with greater use of alcohol, cigarettes, and inhalants among elementary students in Phoenix (Kulis, Marsiglia, & Nieri, 2009) and high school students in Los Angeles (Okamoto, Ritt-Olson, Soto, Baezconde-Garbanati, & Unger, 2009). Analogously, Latinos recruited from Latino Soccer Leagues in North Carolina (average age 29.4) who reported barriers to opportunities based on language and legal status were more likely to engage in binge drinking (Ornelas, Eng, & Perreira, 2010). A study conducted in Mexico found that gay youth were more likely to use cigarettes and alcohol, and that this was apparently mediated by disrespect based on sexual orientation (Ortiz-Hernandez, Tello, & Valdes, 2009).

Thus, the literature provides compelling, but still rather limited, evidence to suggest a relationship between discrimination and substance use among Latina/o populations. The literature has focused on tobacco and alcohol use, with fewer studies examining marijuana and other illicit drugs. Yet, it is critically important to examine how discrimination may be related to illicit drugs given the severe social and medical consequences of illicit drugs.

Prior studies have also not examined gender differences. It is well-established that men are more likely than women to use all types of substances. According to the National Household Survey on Drug Abuse, now the National Survey on Drug Use and Health, these gendered trends have persisted for the past two decades (Substance Abuse and Mental Health Services Administration). Additionally, Latinos tend report more discrimination than Latinas; men report more discrimination based on race and other factors than women, with the exception of gender discrimination (Perez, Fortuna, & Alegria, 2008). These reports are consistent with other research that shows men often face more severe treatment than women. In the court system, male defendants have been found to be more likely to be incarcerated, receive felony versus misdemeanor sentencing, and receive longer sentences than otherwise similar female defendants (Bickle & Peterson, 1991; Daly & Bordt, 1995; Steffensmeier & Demuth, 2006; Steffensmeier, Kramer, & Streifel, 1993; Steffensmeier, Ulmer, & Kramer, 1998). In the educational system, young men are more likely than young women to receive punishments despite similar behavior (Kasinitz, Mollenkopf, & Waters, 2004; Lopez, 2003).

What this suggests is that the experience of discrimination may qualitatively differ between men and women. Moreover, men and women may cope with discrimination differently due to gender differences in socialization patterns based on social norms, gender roles, and expectations (Ptacek, Smith, & Dodge, 1994; Tamres, Janicki, & Helgeson, 2002). For example, as male gender roles often include expectations of increased independence, strength and dominance along with less reliance on social support than women, men may engage in more risktaking behaviors (eg. substance use) (Courtenay, 2000; Ptacek, Smith, & Zanas, 1992; Tamres, et al., 2002). These observations would suggest that discrimination may be more strongly associated with use of more risky behaviors among men than among women. In the context of the current study, this would suggest the hypothesis that discrimination is more strongly associated with use of illicit drugs among men than among women.

Finally, another important feature is that our study is conducted in Brooklyn, New York. This setting is unique compared to prior studies, which have focused primarily on Mexican-origin populations (Flores, Tschann, Dimas, Pasch, & de Groat, 2010; Kam, Cleveland, & Hecht, 2010; Kulis, et al., 2009; Okamoto, et al., 2009; Ornelas, et al., 2010; Ortiz-Hernandez, et al., 2009). Brooklyn, by contrast, has a large Puerto Rican and Dominican presence. Scholars have cautioned that Latina/o populations are very heterogeneous and that findings from one subgroup should not be assumed to hold true for other subgroups. Accordingly, our study fills a gap in the literature by including Puerto Ricans and Dominicans.

To summarize, our hypotheses are: (1) Latina/os who report discrimination will be more likely to use alcohol, marijuana and hard drugs than those who do not report discrimination even after adjusting for other covariates, and (2) gender will moderate the relationship between discrimination and substance use, such that discrimination would be more strongly associated with illicit drugs among men than among women.

METHODS

Sample

Data for this analysis come from the Drug Use and HIV Risk Among Youth (DUHRAY) cross-sectional survey, conducted between July 1997 and June 2000. Although the data were collected in 2000, they remain highly relevant and unique. Few data sources exist that come from communities with high rates of substance use, and which also include measures of discrimination. Respondents, aged 18 to 25, come from Bushwick, which at the time was considered an impoverished Latina/o neighborhood in Brooklyn, New York (Friedman, et al., 2003a). DUHRAY is comprised of two samples, one from households and another based on targeted convenience sampling, details on the sampling strategy can be found at: (Flom, et al., 2001; Friedman, et al., 2003a). Of the households with eligible respondents, 73% were interviewed (Flom, et al., 2001; Friedman, et al., 2003a). Face-to-face interviews for both samples were carried out in both English and Spanish by trained interviewers with extensive ties to the community (Flom, et al., 2001). Of the 528 respondents who completed the questionnaire, 411 were Latina/o, 83 were African American, 18 were White, 4 were Asian American, and 12 identified as “Other”. Non-Latina/os were excluded due to small samples. Ten persons with missing data were also excluded, yielding an analytic sample of 401.

Measures

Dependent variable—The dependent variable for this analysis was self-reported ***substance use*** in the past year using questions similar to those in the National Household Survey on Drug Abuse (now called the National Survey on Drug Use and Health) (United

States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Office of Applied Studies.). Substance use in the past year will be referred to as substance use. Respondents were asked how frequently they used (1) alcohol, (2) marijuana, (3) cocaine, (4) heroin, (5) crack, and (6) injected drugs in the last twelve months using six separate questions. These six questions were recombined into a more parsimonious set of three meaningful outcomes. The distributions were heavily skewed to the right, particularly for harder substances such as heroin, crack, and injected drugs, which were not commonly used. On the other hand, alcohol and marijuana were commonly used. In addition, the majority of substance users reported co-use between alcohol and marijuana. Therefore a categorical variable for substance use in the past year was generated similar to that used by Testa and colleagues (Testa, Livingston, & Leonard, 2003). Substance use was categorized as: (1) no substance use, (2) *only* alcohol and/or marijuana use, and (3) hard drug use *with or without* alcohol and/or marijuana use. Hard drug use was defined as cocaine, heroin, crack, and/or injected drug use (Friedman, et al., 2002). Hard drug use was categorized separately from alcohol/marijuana use, as both alcohol and marijuana were more commonly used in this sample than hard drugs indicating that alcohol and marijuana use may have been normative. Additionally, this categorization enabled a hierarchy of substance use which separated hard drugs, which are more harmful and addictive, from marijuana and alcohol. Subsequent sensitivity analyses revealed that estimates and level of significance did not change if alcohol and marijuana were categorized separately, however cell size was diminished.

Independent variables—*Discrimination* was measured using four items from the Williams Everyday Discrimination scale. Focus groups were conducted with 18 to 21 year old Black and Latina/o young adults at the T.O.P.S. (Time, Opportunity, Peace, and Service) for You nonprofit community-based resource center in Bushwick. The focus groups determined which items resonated with experiences of discrimination prior to data collection. This process led to the selection of four items from the full set of nine items from the Williams Everyday Discrimination scale for inclusion in the DUHRAY questionnaire: (1) People act as if they are afraid of you, (2) People act as if they think you are dishonest, (3) People act as if you are not as good as they are, and (4) People act as if they think you are not smart (Williams, et al., 1997). Although the current study uses only a subset of the original Williams' scale, the four items used showed good inter-item reliability (Cronbach's alpha = 0.77). Response categories were: (1) never, (2) once or twice, (3) a few times, and (4) lots of times. Responses were summed, averaged, and dichotomized as (1) no to low discrimination versus (2) moderate to high discrimination as done by previous studies (Mays & Cochran, 2001; Otiniano & Gee, 2012; Perez, et al., 2008), and will be referred to as (1) no discrimination versus (2) discrimination.

Sociodemographic characteristics included gender, nativity, length of stay in the continental US for those born outside of the US, perceived physical characteristics (interviewer assessed skin color and hair texture), age, employment, education, ethnicity, arrest, and family support. These covariates were included as they have been associated with discrimination and substance use among Latina/os in prior literature (Delgado, 2005; Gil & Vega, 2001).

Drug problems in the neighborhood, household income, and language spoken while growing up were also considered, but not included in final models because these measures were unrelated to substance use in preliminary analyses in the present study.

Analytic Plan

Analyses began with simple descriptive analyses, including correlations as well as other bivariate associations between substance use and independent variables. To assess whether

associations between discrimination and substance use held after controlling for covariates, analyses used multinomial logistic regression (the baseline category was non-use). Two models were specified. The first model included discrimination and sociodemographic characteristics. The second model added the interaction between gender and discrimination to determine if the effect of discrimination varied by gender. Analyses were performed using Stata (v11) software (StataCorp, 2009).

RESULTS

As shown in Table 1, substantial proportion of respondents reported discrimination, 60.2% of Latinos and 41.2% of Latinas. The majority of respondents were Puerto Rican (67.4% of Latinos and 65.5% of Latinas). On average, few respondents completed high school (only 27.5% of Latinos and 32.7% of Latinas), few were currently in school (only 26.7% of Latinos and 33.3% of Latinas), and few were employed (only 39% of Latinos and 26.7% of Latinas). Age ranged from 18 to 25, with the average age approaching 21. Among Latinos, a small proportion of respondents reported non-use (8.9%), while a larger proportion reported using alcohol/marijuana (35.6%), and an even larger proportion reported using hard drugs (55.5%). Among Latinas, about one-fourth reported non-use (26.7%), while a larger proportion reported using alcohol/marijuana (52.7%) and a smaller proportion reported using hard drugs (20.6%).

Table 2 shows the bivariate and multivariate associations between substance use and independent variables using multinomial logistic regression, non-use was the base outcome. Overall, the bivariate (unadjusted) associations were as hypothesized. Discrimination was significantly associated with increased odds of alcohol/marijuana use and increased odds of hard drug use. Age, male gender, and arrest were significantly associated with increased odds of alcohol/marijuana use and increased odds of hard drug use. Years of education, current enrollment in school, and family support were significantly associated with decreased odds of hard drug use (but not alcohol/marijuana use), while Puerto Rican ethnicity, dark skin and curly hair, and length of stay were significantly associated with increased odds of hard drug use.

For the multivariate associations, in Model 1, discrimination was significantly associated with increased odds of alcohol/marijuana use and increased odds of hard drug use. Also in Model 1, age, male gender, and arrest were significantly associated with hard drug use, while additional covariates such as physical characteristics and family support were no longer significantly associated with hard drug use. Model 2, which included the interaction between discrimination and gender, showed the interaction was significant for alcohol/marijuana use. To make this association more meaningful, the predicted probabilities of substance use were calculated by gender and reported discrimination and are presented in Figures 1a and 1b.

Figure 1a shows that for Latinas, the relationship between discrimination and substance use was as expected. Latinas who reported discrimination were *less* likely to not use any substances, *more* likely to use alcohol/marijuana, and *more* likely to use hard drugs than Latinas who reported no discrimination. Specifically, the probability of not using any substances was higher among those reporting no discrimination compared to those reporting discrimination; the probability of using alcohol/marijuana was higher among those reporting discrimination compared to those not reporting discrimination; and the probability of using hard drugs was higher among those reporting discrimination compared to those not reporting discrimination.

However, for Latinos, the relationship between discrimination and substance use was more complex. Figure 1b shows that Latinos who reported discrimination were *less* likely to not use any substances, *less* likely to use alcohol/marijuana, and *more* likely to use hard drugs than Latinos who did not report discrimination. Specifically, the probability of not using any substances was higher among those not reporting discrimination compared to those reporting discrimination; the probability of using alcohol/marijuana was higher among those not reporting discrimination compared to those reporting discrimination; and the probability of using hard drugs was higher among those reporting discrimination compared to those not reporting discrimination.

In sum, reporting of discrimination among Latinos was related to increased risk of hard drug use, and decreased risk of alcohol/marijuana use and non-use. For Latinas, reporting of discrimination was related to increased risk of hard drug and alcohol/marijuana use, and decreased risk of non-use. Overall, Latinos who reported discrimination had the highest probability of using hard drugs; and Latinas who reported discrimination had the highest probability of using alcohol/marijuana.

As a sensitivity check, analyses were carried out excluding outliers (not shown) yielding similar results. In supplemental analyses, we explored additional interactions between gender, discrimination, and family support. None of the two-way and three-way interactions between these measures were significant.

DISCUSSION

Our results show that discrimination was related to increased risk of alcohol, marijuana and hard drug use among a sample of Latina/o young adults, primarily Puerto Ricans. These findings support previous research that has also found that discrimination is related to increased substance use among samples comprised primarily of Mexican Americans (Kulis, et al., 2009;Okamoto, et al., 2009; Ornelas, et al., 2010; Ortiz-Hernandez, et al., 2009), suggesting that substance use may be a coping response to discrimination for various Latina/o subgroups.

An important contribution of our study was to distinguish between men and women. We found that the relationship between discrimination and substance use differed between men and women, a finding that was not reported by previous studies with samples comprised primarily of Mexican Americans (Kulis, et al., 2009; Okamoto, et al., 2009; Ornelas, et al., 2010; Ortiz-Hernandez, et al., 2009). Prior studies, including those that have not focused on Latina/o populations, have generally not explored these gender differences, despite evidence that men are more likely to use drugs and report racial discrimination compared to women. Future studies are necessary to determine if these gender differences are also found among other Latina/o and non- Latina/o populations.

Our data supported our hypothesis that gender moderated discrimination, with stronger associations for Latinos, but also showed an important nuance: discrimination was related to different substances according to gender. Latinas who reported discrimination had the highest probability of using alcohol/marijuana. By contrast, Latinos who reported discrimination had the highest probability of using hard drugs. Thus, it is not merely the *strength* of association between discrimination and substance use that varies by gender, but rather, that the *type* of association differs. It is possible that Latinas use more commonly used substances, such as alcohol and marijuana to cope with discrimination, while Latinos use riskier substances, such as hard drugs to cope with discrimination.

We do not have data that would permit further probing of the reasons why this would occur. One possible explanation may be related to the gendered nature of social norms, roles, and

expectations which in turn may lead to gendered coping responses to discrimination (Ptacek, et al., 1992; Tamres, et al., 2002). Prior studies suggest that men have more maladaptive coping patterns than women (Cooper, Russell, Skinner, Frone, & Mudar, 1992; Lindquist, Beilin, & Knuiman, 1997; Ptacek, et al., 1992), with men engaging in coping strategies that are detrimental to their health such as relying on substances to cope with stress. This is coupled with social norms around substance use that are common in the US and in Latin America. Alcohol use in particular is often considered normative for men and is often seen as a characteristic proving ones' masculinity (Lee & Fiske, 2006; Lemle & Mishkind, 1989). Both alcohol and marijuana use have become more acceptable in the US, particularly among young men of color in social settings, and are not stigmatized in the same way that hard drugs are. As these substances may be considered normative for men, they may not be the substances of choice when coping with stressors such as discrimination for Latinos. Future studies should include measures of social norms, and more general coping measures to evaluate their gendered nature among various racial/ethnic groups to determine how these norms and coping strategies may vary within and across racial/ethnic groups. Our findings highlight the importance of looking at multiple outcomes and considering variation by gender.

Limitations

Several limitations should be acknowledged. Self-reported substance use may be underreported. However, steps were taken to assure confidentiality of responses decreasing the likelihood of under-reporting (Harris, Griffin, McCaffrey, & Morral, 2008). Respondents were also given urine tests. The urine tests were not analyzed as prior research suggests that the self-reported measures may be more accurate (Harrison & Hughes, 1997). Nonetheless, the testing itself is valuable because it appears to prompt more accurate self-reporting (Friedman, et al., 2003b; Morral, McCaffrey, & Iguchi, 2000). Additionally, recall for past year use, as we have done, has typically been more reliable than recall for past month use (O'Malley, Bachman, & Johnston, 1983).

Additionally, as DUHRAY is a cross-sectional study, the relationship between discrimination and substance use cannot be reasoned as causal. Of note, discrimination could have occurred any time during a respondent's lifetime, before or after initiation using substances. Future longitudinal studies should be carried out to confirm the probable causal relationship between discrimination and substance use, particularly among Latina/os. Longitudinal studies can help determine mechanisms through which discrimination and substance use are related and are moderated by gender.

The data used in this analysis was collected from 1997–2000, raising questions about temporal trends. An important consideration, however, is that while prevalence rates of substance use and perhaps discrimination may change with time, there is no reason to suspect that the theoretical associations between stress and coping have changed. In other words, our data should not be used to make inferences about the patterns of drug use for the Bushwick community in the current day, but the data still remain valuable for testing the associations between discrimination and substance use. Further, the data are unique because they come from a community sample with a high rate of substance use. By comparison, most other studies have community samples that have relatively low rates of substance use, or have clinical samples that have high rates of substance use. Hence, our data shed insights into a specifically vulnerable community that remains understudied.

Finally, these data were collected in only one community in one country, and these analyses were restricted to Latinos and Latinas. Such limitations are common in research. We suggest that future research should study discrimination effects and interactions with gender in

socially-subordinated racial/ethnic groups in a variety of indigenous and diasporic populations throughout the world.

Conclusion

Despite limitations the present study provides a foundation for future research and practice. The present study focused on discrimination at the interpersonal level. Future studies should assess discrimination at the policy, institutional, and neighborhood level, as this could inform prevention and treatment programs that also work towards addressing issues related to discrimination. For example, as the war on drugs has disproportionately targeted African Americans and Latina/os (Iguchi, Bell, Ramchand, & Fain, 2005), drug policies should be reevaluated as they can be interpreted as discriminatory and may also lead to ideologies that foster discrimination (Sacher, 1997; Sandy, 2003). On the other hand, policies that enable the reintegration of individuals who have been arrested back into their communities could work against these ideologies. The war on drugs has severely impacted the Latina/o population, with a disproportionate number of Latina/os, both men and women, facing incarceration for non-violent drug related charges. As such, the policies related to the criminal justice system have vast implications for Latina/os. First, Latino defendants are more likely to be incarcerated and more likely to receive harsher sentences than White male defendants possibly due to stereotypes of Latinos as more dangerous, threatening, violent, and disrespectful than Whites (Steffensmeier & Demuth, 2006). Second, there has been a dramatic increase in the incarceration of Latinas particularly that of Latinas dealing with substance use disorders (Solinger, 2010). The impact that the war on drugs has on Latina/os also appears to be gendered and points to the importance of considering gender when discussing substance use and drug policies.

In summary, discrimination was related to substance use among Latina/o young adults living in Brooklyn, New York. This suggests that Latina/os may use alcohol, marijuana, and hard drugs to cope with discrimination. Further, Latinos may to turn to riskier substances to cope with discrimination compared to Latinas, pointing to the unique needs of young men versus young women. These unique needs should be considered when developing prevention and treatment programs. Finally, future research should explore interactions among race/ethnicity, discrimination experiences, gender, and social norms when studying drug use patterns.

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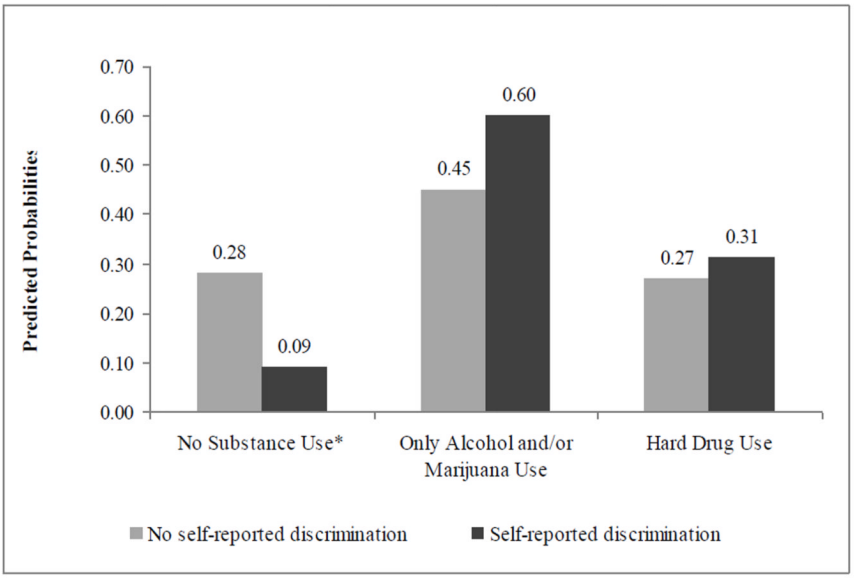
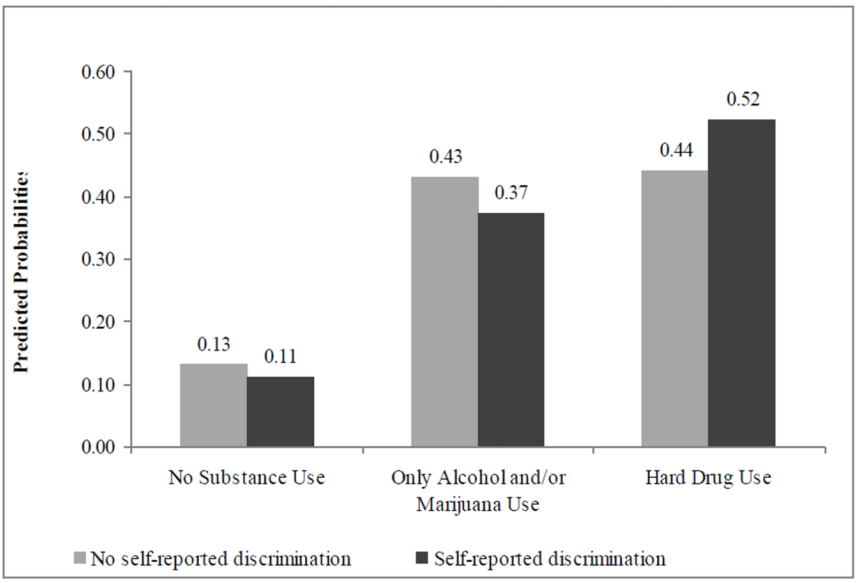
a. Predicted Probabilities of Substance Use for Latinas as a Function of Self-reported Discrimination



Notes:
Figure uses Model 2 from Table 2 which incorporates gender comparison within the model, adjusting for all other covariates. Drug Use and HIV Risk Among Youth (DUHRAY), 1997-2000.
* Denotes predicted probabilities that are statistically different comparing no self-reported discrimination to self-reported discrimination within each substance use outcome.

b. Predicted Probabilities of Substance Use for Latinos as a Function of Self-reported Discrimination



Notes:
Figure uses Model 2 from Table 2 which incorporates gender comparison within the model, adjusting for all other covariates. Drug Use and HIV Risk Among Youth (DUHRAY), 1997-2000.

Figure 1.

TABLE 1

Descriptive Statistics of Latina/os (unweighted). Drug Use and HIV Risk Among Youth (Duhray), 1997–2000. (N=401)

	LATINOS (n=236)	LATINAS (n=165)	
Discrimination (%)	60.2	41.2	
DEMOGRAPHICS			
Latina/o Ethnicity (%)			
Puerto Rican	67.4	65.5	
Dominican	14.8	20.0	
Central/South American	1.3	1.8	
Mexican	1.7	0.6	
Columbian	0.4	0.0	
Cuban	9.3	6.7	
Other	5.1	5.5	
Age, mean (SE) range	20.8 (2.3)	20.9 (2.2)	18–25
Education (%)			
Less than high school	10.6	6.7	
Ninth	15.3	18.2	
Tenth	21.2	17.0	
Eleventh	25.4	25.5	
Twelfth	27.5	32.7	
Currently in school (%)	26.7	33.3	
Currently employed (%)	39.0	26.7	
IMMIGRANT CHARACTERISTICS			
Birthplace (%)			
United States	67.8	66.1	
Puerto Rico	14.8	13.9	
Dominican Republic	7.6	14.6	
Mexico	1.3	1.2	
Ecuador	5.1	0.6	
Other	3.4	3.6	
Length of stay[1], mean (SE) range	11.4 (6.5)	11.8 (7.2)	0.5–24
SOCIAL INFLUENCES			
Reported family support (%)	73.7	83.0	
Arrested (%)	65.7	22.4	
Perceived physical characteristics:			
Dark skin and Curly hair (%)	41.5	27.3	
SUBSTANCE USE			
Use of substances in past year (%)			
No use	8.9	26.7	
Alcohol and/or Marijuana use	35.6	52.7	
Hard drug use	55.5	20.6	

Notes:

US Born refers to those born in the Continental US. Length of stay indicates duration in the US for those not born in the Continental US. Hard drug use refers to cocaine, heroin, crack, and injected drug use.

[1] Latinos n=76; Latinas n=56.

TABLE 2

Association Between Discrimination and Substance Use Among Latina/os (unweighted). Drug Use and HIV Risk Among Youth (Duhray), 1997–2000. (N=401)

	Only Alcohol/Marijuana Use			Hard Drug Use		
	Unadjusted	Adjusted		Unadjusted	Adjusted	
	OR (SE)	Model 1 OR (SE)	Model 2 OR (SE)	OR (SE)	Model 1 OR (SE)	Model 2 OR (SE)
Discrimination	2.663 **	2.405 **	4.692 **	5.647 ***	3.029 **	4.417 *
	(0.855)	(0.819)	(2.273)	(1.847)	(1.187)	(2.724)
Male	2.023 *	1.438	2.402 *	8.073 ***	4.464 ***	5.825 **
	(0.619)	(0.500)	(1.037)	(2.646)	(1.895)	(3.211)
Discrimination*Male	-	-	0.223 *	-	-	0.368
	-	-	(0.155)	-	-	(0.301)
Ever arrested	2.944 **	2.314	2.445	30.798 ***	12.138 ***	12.575 ***
	(1.217)	(1.057)	(1.123)	(13.149)	(5.828)	(6.051)
Age	1.165 *	1.186 *	1.168	1.314 ***	1.349 **	1.331 **
	(0.086)	(0.097)	(0.096)	(0.098)	(0.133)	(0.131)
Education	0.948	0.96	0.978	0.634 ***	0.826	0.839
	(0.114)	(0.13)	(0.135)	(0.076)	(0.13)	(0.133)
Currently in school	0.966	1.278	1.184	0.268 ***	0.729	0.686
	(0.288)	(0.439)	(0.414)	(0.089)	(0.321)	(0.304)
Currently employed	1.456	1.308	1.368	0.646	0.614	0.628
	(0.443)	(0.444)	(0.472)	(0.206)	(0.261)	(0.269)
Puerto Rican	0.902	0.746	0.71	3.703 ***	2.275	2.201
	(0.265)	(0.274)	(0.267)	(1.204)	(1.029)	(1.007)
Length of stay	1.028	1.011	1.017	1.112 **	1.087	1.091
	(0.038)	(0.041)	(0.042)	(0.043)	(0.057)	(0.058)
Foreign born	0.685	0.671	0.660	0.595	0.434	0.428
	(0.205)	(0.380)	(0.378)	(0.181)	(0.340)	(0.337)

	Only Alcohol/Marijuana Use			Hard Drug Use		
	Unadjusted	Adjusted		Unadjusted	Adjusted	
	OR (SE)	Model 1 OR (SE)	Model 2 OR (SE)	OR (SE)	Model 1 OR (SE)	Model 2 OR (SE)
Family support	0.624	0.702	0.718	0.416 *	0.559	0.569
	(0.254)	(0.301)	(0.311)	(0.166)	(0.274)	(0.279)
Dark skin and Curly hair	1.141	1.011	1.024	2.072 *	2.040	2.077
	(0.369)	(0.360)	(0.370)	(0.660)	(0.833)	(0.854)

Notes:

Models used multinomial regression. No substance use is the base outcome. OR = odds ratio; SE= standard error.

Age centered at 20.85 and length of stay conditionally relevant based on nativity.

Baseline for adjusted models: Currently not in school, currently not employed, non-Puerto Rican, US born, no family support, no dark skin and curly hair, female, never arrested, no discrimination.

* $p \leq 0.05$;

** $p \leq 0.01$

*** $p \leq 0.001$