Research paper

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 18–25 ($N = 401$) 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/cannabis and hard drug use among young Latina women. However, discrimination was associated with *decreased* risk of alcohol/cannabis 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.

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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, & McInnch, 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, 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, 2010).

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 cannabis

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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 to 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 risk-taking behaviors (e.g. 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, cannabis 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 18–25, come from Bushwick, which at the time was considered an impoverished Latina/o neighborhood in Brooklyn, New York (Friedman, Flom, Kottiri, Neaigus, 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, Flom, Kottiri, Neaigus, et al., 2003a). Of the households with eligible respondents, 73% were interviewed (Flom et al., 2001; Friedman, Flom, Kottiri, Neaigus, 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) cannabis, (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 cannabis were commonly used. In addition, the majority of substance users reported co-use between alcohol and cannabis. Therefore a categorical variable for substance use in the past year was generated similar to that used by Testa, Livingston, and Leonard (2003). Substance use was categorized as: (1) no substance use, (2) *only* alcohol and/or cannabis use, and (3) hard drug use *with or without* alcohol and/or cannabis 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/cannabis use, as both alcohol and cannabis were more commonly used in this sample than hard drugs indicating that alcohol and cannabis 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 cannabis and alcohol. Subsequent sensitivity analyses revealed that estimates and level of significance did not change if alcohol and cannabis 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 18–21-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: