Short Communication

Alcohol use severity and depressive symptoms among late adolescent Hispanics: Testing associations of acculturation and enculturation in a bicultural transaction model

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HIGHLIGHTS

• Higher ethnic discrimination was associated with higher alcohol use severity.
• Higher ethnic discrimination was associated with higher depressive symptoms.
• Higher intragroup marginalization was associated with higher depressive symptoms.
• Ethnic discrimination functioned as a mediator of acculturation/enculturation.
• Intragroup marginalization functioned as a mediator of acculturation/enculturation.

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ABSTRACT

Research has indicated that Hispanics have high rates of heavy drinking and depressive symptoms during late adolescence. The purpose of this study was to test a bicultural transaction model composed of two enthnocultural orientations (acculturation and enculturation); and stressful cultural transactions with both the U.S. culture (perceived ethnic discrimination) and Hispanic culture (perceived intragroup marginalization) to predict alcohol use severity and depressive symptoms among a sample of 129 (men = 39, women = 90) late adolescent Hispanics (ages 18–21) enrolled in college. Results from a path analysis indicated that the model accounted for 18.2% of the variance in alcohol use severity and 24.3% of the variance in depressive symptoms. None of the acculturation or enculturation domains had statistically significant direct effects with alcohol use severity or depressive symptoms. However, higher reports of ethnic discrimination were associated with higher reports of alcohol use severity and depressive symptoms. Similarly, higher reports of intragroup marginalization were associated with higher depressive symptoms. Further, both ethnic discrimination and intragroup marginalization functioned as mediators of multiple domains of acculturation and enculturation. These findings highlight the need to consider the indirect effects of enthnocultural orientations in relation to health-related outcomes.

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1. Introduction

Late adolescence spans ages 18–21, corresponds with the college years for many (Steinberg, 2008) and is a time of transition from adolescence to emerging adulthood. This period is also marked by heavy

drinking (National Institute on Alcohol Abuse and Alcoholism, 2006) and elevated depressive symptoms (Rudolph, 2009). Further, heavy drinking and elevated depressive symptoms are notably prevalent among late adolescent Hispanics (Cheref, Lane, Polanco-Roman, Gadol, & Miranda, 2014; Venegas, Cooper, Naylor, Hanson, & Blow, 2012), due in part to ethnocultural orientation (Abraído-Lanza, Armbrister, Flórez, & Aguirre, 2006).

2. Ethnocultural orientation

Ethnocultural orientation consists of two cultural dimensions: (1) *acculturation*, the degree to which an individual from one culture (e.g., Hispanic) acquires cultural behaviors, beliefs, and values from a new receiving culture (e.g., U.S.; Williams & Berry, 1991); and (2) *enculturation*, a process of (re)-socialization heritage culture norms (Kim & Abreu, 2001). These dimensions can unfold independently over time and can be measured separately (Kim & Omizo, 2006; Schwartz, Unger, Zamboanga, & Szapocznik, 2010).

Further, each ethnocultural dimension consists of multiple domains (Schwartz et al., 2010). For instance, the *behavioral domain* encompasses cultural practices such as preferences in language use and food choice, whereas the *affective domain* is comprised of attitudes toward the heritage and receiving culture (Kim & Abreu, 2001).

2.1. Enthnocultural orientation and health

Among Hispanics, higher acculturation is associated with greater alcohol consumption (Zemore, 2007) and fewer depressive symptoms (Torres, 2010). Conversely, higher enculturation is associated with less alcohol consumption (Des Rosiers, Schwartz, Zamboanga, Ham, & Huang, 2013) and fewer depressive symptoms (Cano & Castillo, 2010). However, the extant research on enculturation is limited (Castillo & Caver, 2009) and is heavily focused on the behavioral domain of ethnocultural orientation (Abraído-Lanza et al., 2006). Further, research lacks theoretical explanatory frameworks for relations between ethnocultural orientation and health (Abraído-Lanza et al., 2006). Consequently, little is known about the mechanisms through which ethnocultural orientation affects health outcomes. To address this gap, we examined associations of acculturation and enculturation domains with alcohol use severity and depressive symptoms, as well as potential mediators of those associations.

2.2. Cultural transactions

Cultural transactions, or perceptions of one's interactions with the receiving and heritage cultures, may help explain the link between ethnocultural orientation and health outcomes. Although cultural transactions can be positive (Cano et al., in press) or negative (Cano et al., 2015), we focused on negative cultural transactions. This follows from *Acculturation Strain Theory*, which proposes that enthnocultural orientation, operationalized as a unidimensional continuum of acculturation, is associated with increased experience of cultural stressors that in turn contribute to substance use and poor mental health outcomes (Vega, Zimmerman, Gil, Warheit, & Apospori, 1997). Although this model does not explicitly discuss the role of enculturation on cultural transactions, it argues that negative cultural transactions mediate the effect of ethnocultural orientation on health outcomes.

Among Hispanics, *ethnic discrimination* (i.e., being treated unfairly or negatively based on one's ethnic background; Phinney, Madden, & Santos, 1998) may serve as an indicator of an *intercultural transaction* (perceptions of encounters with the receiving [U.S.] culture) that links ethnocultural orientation with substance use and mental health. Higher acculturation is associated with greater perceived discrimination, whereas higher enculturation is associated with less perceived discrimination (Lorenzo-Blanco & Cortina, 2013). In turn, perceived discrimination is associated with increased substance use (Lorenzo-

Blanco & Cortina, 2013) and depressive symptoms (Lorenzo-Blanco, Unger, Ritt-Olson, Soto, & Baezconde-Garbanati, 2011).

Intragroup marginalization, the perceived distancing from one's ethnic group members when one displays characteristics of the dominant group (Castillo, Conoley, Brossart, & Quiros, 2007), may serve as an indicator of an *intracultural transaction* (perceptions of encounters with the heritage [Hispanic] culture) that link ethnocultural orientation with substance use and mental health. Higher acculturation is associated with greater intragroup marginalization (Castillo et al., 2007). In turn, greater intragroup marginalization is associated with greater depressive symptomatology (Cano, Castillo, Castro, de Dios, & Roncancio, 2014). No published study has examined relations between intragroup marginalization and enculturation or alcohol use.

2.3. Present study

Therefore, we tested a *bicultural transaction model* that integrates a bidimensional operationalization of ethnocultural orientation and two cultural transactions: intragroup marginalization and ethnic discrimination. The purpose of this model was to develop a framework that was both culturally and clinically relevant to understand substance use and mental health among Hispanics. We hypothesized that behavioral and affective acculturation and enculturation, as well as intragroup marginalization and perceived discrimination, would be directly associated with alcohol use and depressive symptomatology. In addition, we hypothesized that behavioral and affective acculturation and enculturation would be indirectly associated with alcohol use and depressive symptomatology by way of their associations with intragroup marginalization and perceived discrimination.

3. Method

3.1. Participants

The sample consisted of 129 late adolescents. Participants were recruited via an email that described study aims and procedure, contained an Internet link to the anonymous survey, and voluntary consent information. Eligible participants had to self-identify as Hispanic or Latina/o and be enrolled in a 2 or 4-year institution of higher education. No compensation was provided.

3.2. Measures

Alcohol use severity was measured with the Alcohol Use Disorder Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). Higher scores indicated greater alcohol use severity.

Depressive symptoms were measured with the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). Higher scores indicated higher depressive symptoms.

Perceived ethnic discrimination was measured with the Environmental Scale from the Social, Attitudinal, Familial, and Environmental Acculturation Stress Scale (S.A.F.E.; Fuertes & Westbrook, 1996). Higher mean scores indicated a higher perception of ethnic discrimination.

Intragroup marginalization was measured using the Intragroup Marginalization Inventory-Family Scale (IMI-F; Castillo et al., 2007). Higher summed scores indicated greater perceptions of intragroup marginalization.

Behavioral acculturation and *enculturation* were measured with the Anglo Orientation Subscale (AOS) and the Mexican Orientation Subscale (MOS), respectively, of the Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Cuéllar, Arnold, & Maldonado, 1995). Higher mean subscale scores indicate higher behavioral acculturation and enculturation. *Affective acculturation* and *enculturation* were evaluated with the Anglo Marginalization Subscale (ANGMAR) and the Mexican Marginalization Subscale (MEXMAR) of the ARSMA-II. Higher mean