Measuring alcohol use across the transition to adulthood: Racial/ethnic, sexual identity, and educational differences

Jessica N. Fish⁎, Amanda M. Pollitt, John E. Schulenberg, Stephen T. Russell

HIGHLIGHTS

- The measurement invariance of alcohol use varied across key demographic groups.
- Models were more invariant across groups during adolescence than adulthood.
- The alcohol use measure operated differently for youth and young adults.
- Most longitudinal comparisons were scalar non-invariant; half were metric invariant.
- Alcohol use measures that are non-invariant across groups or time may bias results.

ARTICLE INFO

Keywords:
Alcohol use
Measurement invariance
Development
Race/ethnicity
Sexual identity
College attendance

ABSTRACT

Background: Patterns of alcohol use change from adolescence to adulthood and may differ based on race/ethnicity, sexual identity, and education. If alcohol use measures do not operate consistently across groups and developmental periods, parameter estimates and conclusions may be biased.

Objectives: To test the measurement invariance of a multi-item alcohol use measure across groups defined by race/ethnicity, sexual identity, and college education during the transition to adulthood.

Methods: Using three waves from the National Longitudinal Study of Adolescent to Adult Health, we tested configurational, metric, and scalar invariance of a 3-item alcohol use measure for groups defined by race/ethnicity, sexual identity, and college education at three points during the transition to adulthood. We then assessed longitudinal measurement invariance to test the feasibility of modeling developmental changes in alcohol use within groups defined by these characteristics.

Results: Overall, findings confirm notable variability in the construct reliability of a multi-item alcohol use measure during the transition to adulthood. The alcohol use measure failed tests of metric and scalar invariance, increasing across ages, both between- and within-groups defined by race/ethnicity, sexual identity, and college education, particularly among females.

Conclusions: Measurement testing is a critical step when utilizing multi-item measures of alcohol use. Studies that do not account for the effects of group or longitudinal measurement non-invariance may be statistically biased, such that recommendations for risk and prevention efforts could be misguided.

1. Introduction

Given knowledge on the progression of alcohol use across the transition to adulthood (Britton, Ben-Shlomo, Benzeval, Kuh, & Bell, 2015; Schulenberg, Johnston, O’Malley, Bachman, Miech, & Patrick, 2017; Maggs & Schulenberg, 2004; Schulenberg, Masklowsky, & Jager, 2017), researchers are focused on groups that demonstrate risky drinking and greater susceptibility for alcohol use disorders (AUDs; Brown et al., 2008; Larimer & Arroyo, 2016; National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2009). Vulnerable groups include racial and ethnic minorities (Delker, Brown, & Hasin, 2016; Chen & Jacobsen, 2012; Whitbrodt, Mulia, Zemore, & Kerr, 2014), sexual minorities (gay/lesbian or bisexual [LGB] people; Hughes et al., 2016; Talley et al., 2016), and college attendees (Chen & Jacobsen,
Differences in alcohol use and the associated consequences across the life course for racial/ethnic groups are exceedingly complex (Kerr, Greenfield, Bond, Ye, & Rehm, 2011; Delker et al., 2016; Witbrodt et al., 2014). Studies of youth demonstrate that White adolescents drink more than their Black peers (Jackson, Sher, Cooper, & Wood, 2002; Paschall, Freisthler, & Lipton, 2005; Johnston, O'Malley, Miech, Bachman, & Schulenberg, 2017), with mixed findings when comparing non-Hispanic White to Hispanic adolescents (Johnston et al., 2017; Wahl & Eitle, 2010). These differences, however, do not hold over time. In one longitudinal comparison, Hispanic youth demonstrated higher rates of alcohol use during early adolescence but were surpassed by White, non-Hispanic youth by mid-adolescence (Chen & Jacobsen, 2012; see also, Haberstick et al., 2014). Relative to comparisons during adolescence, alcohol related vulnerabilities among Black adults appear later in the lifespan due to the persistence and acceleration of frequent or heavy alcohol consumption across the 20s and 30s (Chen & Jacobsen, 2012; Muthén & Muthén, 2000), which elevates risk for problems associated with alcohol use and AUDs as they age (Mula et al., 2009; Vasilenko, Evans-Polce, & Lanza, 2017).

1.2. Sexual identity

Research on youth and adults consistently demonstrate alcohol-related disparities between sexual minorities and heterosexuals (IOM, 2011; Marshal et al., 2008; McCabe et al., 2009; Tally et al., 2016). Sexual minorities, particularly sexual minority women (Hughes et al., 2016), drink more often, in higher quantities, and have more consequences related to drinking than heterosexuals (Bos et al., 2016; Case et al., 2004; Rosario et al., 2014; Russell, Driscoll, & Truong, 2002; Talley et al., 2010, 2014). Longitudinal studies also document differences in alcohol use trajectories for sexual minorities compared to heterosexuals during the transition to adulthood (Fish & Pasley, 2015; Hatzenbuehler, Corbin, & Fromme, 2008; Marshal et al., 2009, 2012) and sexual minority women, compared to heterosexual women, may be more likely to continue heavy alcohol use as they age (Dermody et al., 2014; Needham, 2012).
دریافت فوری
متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات