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Sexual orientation and Substance use trajectories in emerging adulthood

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Sexual Orientation and Substance Use Trajectories in Emerging Adulthood.

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BACKGROUND

- Sexual minority individuals are at elevated risk for engagement in substance use behaviors (SUBs; e.g., Marshal et al., 2008; Marshal et al., 2009; Meyer, 2003; Talley et al., in press), compared to their sexual majority counterparts.
- Recent findings have revealed differences in sexual-minority substance use patterns based on gender (Corliss et al., 2008; Ziyadeh et al., 2007) and sexual orientation subgroup (Corliss et al., 2008; Marshal et al., 2009; Talley et al., in press).
- Past research has been limited to cross-sectional data (e.g., Stall et al., 2001) and only eight studies (e.g., Corliss et al., 2008; Marshal et al., 2009) have examined patterns of substance use among non-clinical samples of sexual minority individuals over time and compared those to the patterns of use among samples of sexual majority individuals.

• The purpose of the present study was:

- To identify, among sexual minority individuals, latent subgroups based on facets of sexual orientation using longitudinal latent class analysis (LLCA).
- To examine whether the composition of the latent classes is similar across male and female sexual minorities.
- To compare trajectories of alcohol use among sexual minority (latent classes) and sexual majority (known class) men and women during the onset of emerging adulthood.

HYPOTHESES

We anticipated that the composition of latent subgroups would be somewhat distinct across gender categories given research on the greater “fluidity” of sexual orientation among women (Diamond, 2003; 2005). We expected that latent classes comprised of bisexual and mostly heterosexual men and women would report higher levels of alcohol involvement (see Corliss et al., 2008), compared to exclusively heterosexual persons.

METHOD

PARTICIPANTS

- Subsample of the IMPACTS (Sher & Rutledge, 2007) dataset : $n = 2643$
 - Women ($n = 1610$); Men ($n = 1033$)
 - Baseline Age: 18.72 ($SD = .47$)
 - 90% Caucasian/European-American

PROCEDURE

Eighty-eight percent of 4,226 incoming first-time college students at the University of Missouri—Columbia completed a paper-and-pencil questionnaire in the summer orientation preceding college matriculation. This precollege sample was followed up and administered a Web-based survey every fall (October/November) and spring (March/April) of the subsequent 4 years.

• Sexual Orientation (assessed in the Spring of every year):

- Self-identification = self-labeling of sexual identity
“How would you describe your sexual orientation?”
(1 = Exclusively homosexual; 5 = Exclusively heterosexual).
- Sexual attraction = degree of opposite- vs. same-sex sexual attractions
“To which group are you sexually attracted?”
(1 = Opposite-sex only; 7 = Same-sex only)
- Sexual behavior = degree of opposite- vs. same-sex sexual activity
“With which group do you engage in sexual behavior?”
(1 = Opposite-sex only; 7 = Same-sex only).

References: Marshal MP, Friedman MS, Stall R, et al. *Addiction* 2008; **103**: 546-556; Marshal MP, Friedman MS, Stall R, et al. *Addiction* 2009; **104**: 974-981; Meyer I. *Psychological Bulletin* 2003; **129**: 674-697; Talley AE, Sher, KJ, Littlefield AK. *Addiction* in press. Corliss HL, Rosario M, Wypij D et al. *Archives Pediatr & Adolesc Med*, 2008; **162**: 1071-1078; Ziyadeh NJ, Prokop LA, Fisher LB; et al. *Drug Alcohol Depend*. 2007; **87**(2-3): 119-130.; Diamond LM. *J Pers Soc Psychol* 2003; **84**: 352-364; Diamond LM. *Psychol Women Q* 2005; **29**: 119-128.

METHOD

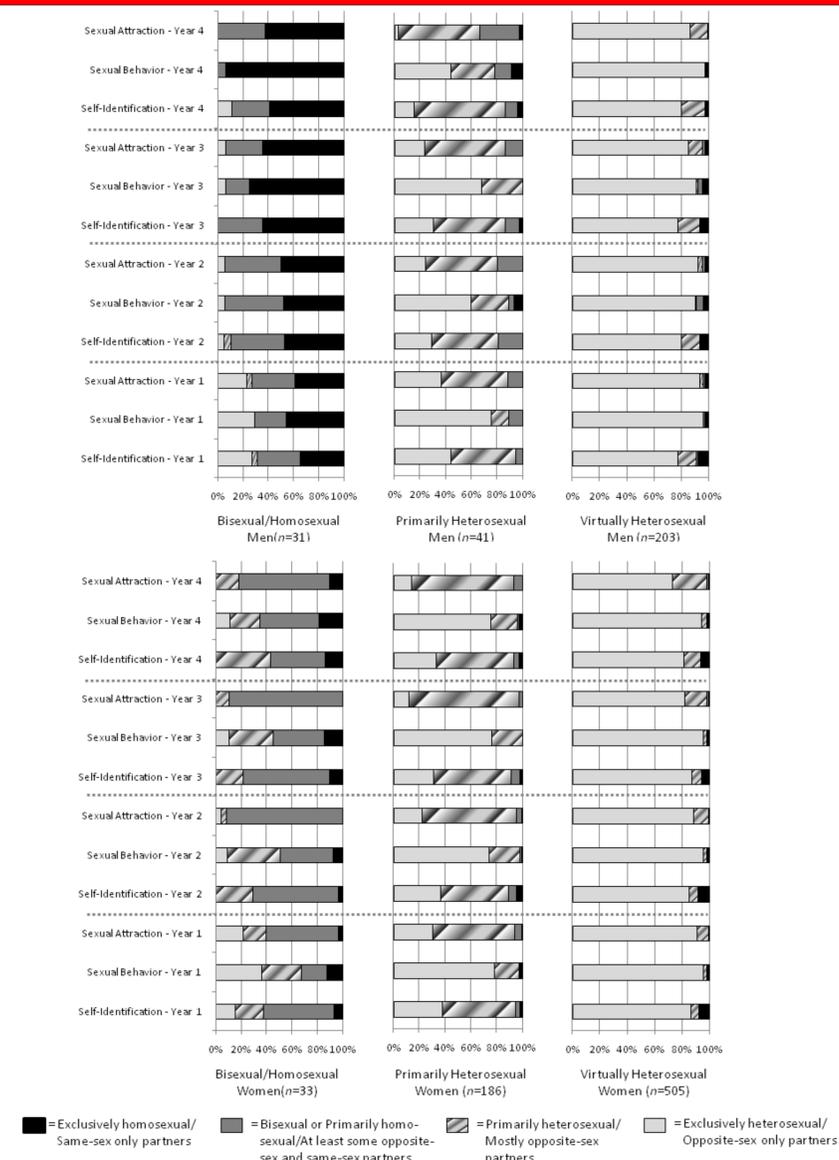
Primary Outcomes:

Substance Use Behaviors (SUBs):

- Usual quantity of alcohol consumed: “In the past 3 months, when you were drinking alcohol, how many drinks did you usually consume?” (0=Did not drink in past 3 mos.; 7 = 12 or more drinks).
- Frequency of alcohol use in previous 3 months: (0=Never/Not in the past 3 months; 7=More than 40 times).
- Frequency of binge drinking: “Over the past 30 days, on how many days did you drink five or more drinks in a row?” (0=Not at all in the past 30 days; 7 = Every day).

Data Analyses: In comparing different LLCA solutions with the same set of data, models with the lowest BIC values were selected. The most likely class membership of sexual minority persons and the known class membership of exclusively heterosexual individuals were used in repeated measure hierarchical linear models to examine alcohol use outcomes over time (controlling for ethnicity, race, and age at baseline).

Figure 1 Longitudinal Latent Classes



RESULTS & CONCLUSIONS

- LLCA identified three latent classes based on facets of sexual orientation over the four-year period for both male (Entropy=.95) and female (Entropy=.91) sexual minority participants. As shown in Figure 1, one class was composed of bisexual as well as primarily or exclusively homosexual individuals (B/G), a second class was composed of primarily heterosexual individuals (PS), largely with regard to self-identification and sexual attraction, and a third class was composed of those individuals having only a slight tendency toward non-heterosexuality (i.e., “virtually straight,” VS).
- As shown in Figure 2, VS men ($n = 203$) endorsed the lowest levels of alcohol involvement, especially compared to levels endorsed by ES men ($n = 758$) and B/G men ($n = 31$). Depicted in Figure 3, PS women ($n = 186$) reported the highest levels of alcohol involvement at the onset of emerging adulthood, especially compared to levels reported by ES women ($n = 886$) and VS women ($n = 505$).
- These findings provide evidence that alcohol use is relatively normative among most college-aged men, with the exception of VS men. Finally, there is initial evidence that PS women may display the most problematic alcohol use patterns, compared to their other female counterparts, during the onset of emerging adulthood.

Figure 2 Estimated (from repeated-measures analysis) mean-level changes in alcohol involvement for male participants over time, as moderated by sexual orientation classification group

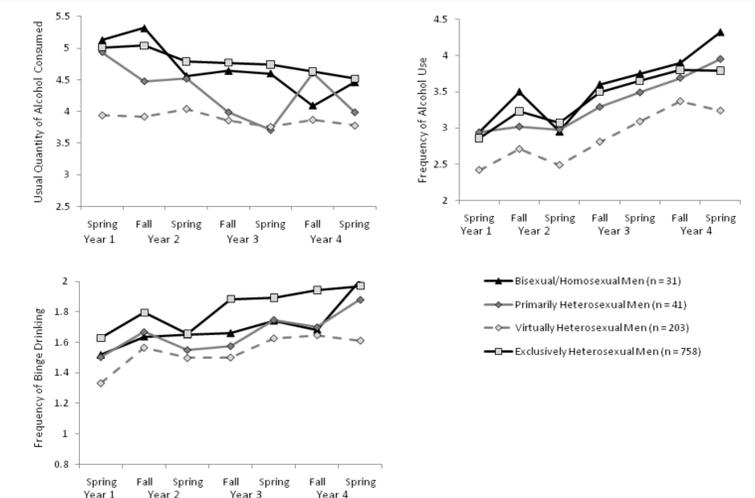
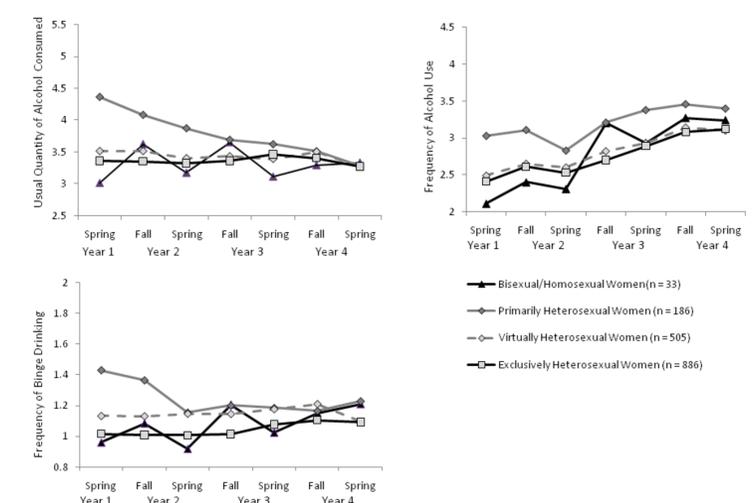


Figure 3 Estimated (from repeated-measures analysis) mean-level changes in alcohol involvement for female participants over time, as moderated by sexual orientation classification group



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