

Childhood Sexual/Physical Assault, Drinking,  
Depression, and Risky Sexual Behaviors of  
White and African-American Women

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# Problem Statement

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- Among child-bearing aged women aged 15 to 44, nearly 70% reported current alcohol use and 28% reported binge drinking (from the 2010 NSDUH).
- 7% of women had more than 3 drinks on the one occasion on each of 5 or more days in the past 30 days (from the 2010 NSDUH).
- 6% of women have substance abuse or dependence (from the 2010 NSDUH).
- Compared to 1997, the number of women who had more than 1 drink per day (more than 7 drinks per week) in 2008 had increased from 3.3% to 5% (from 1997–2008 NHIS).
- 10% of female drinkers reported 1–11 days of binge drinking per month and 5% of female drinkers reported 12 or more days of binge drinking episode per month (from the 2008 NHIS).

# Problem Statement

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- ◉ Women's excessive drinking damage their health, safety, and general well-being.
  - Mental health problems
  - Risky sexual behaviors
  - Negative birth outcomes

# Problem Statement

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- Childhood sexual or physical violence have been shown as a significant predictor of women's drinking.
- Childhood sexual or physical violence are also significantly related to mental health problems and/or risky sexual behaviors.
- Prevalence of childhood sexual or physical violence
  - 17.6% of children experienced physical abuse and 9.2% of children suffered sexual abuse (2011 USDHHS).
  - Approximately 6–23% of women experienced sexual or physical abuse and/or assault during their childhood (Cogle et al., 2010; Green et al., 2010).

# Limitation of Previous Studies

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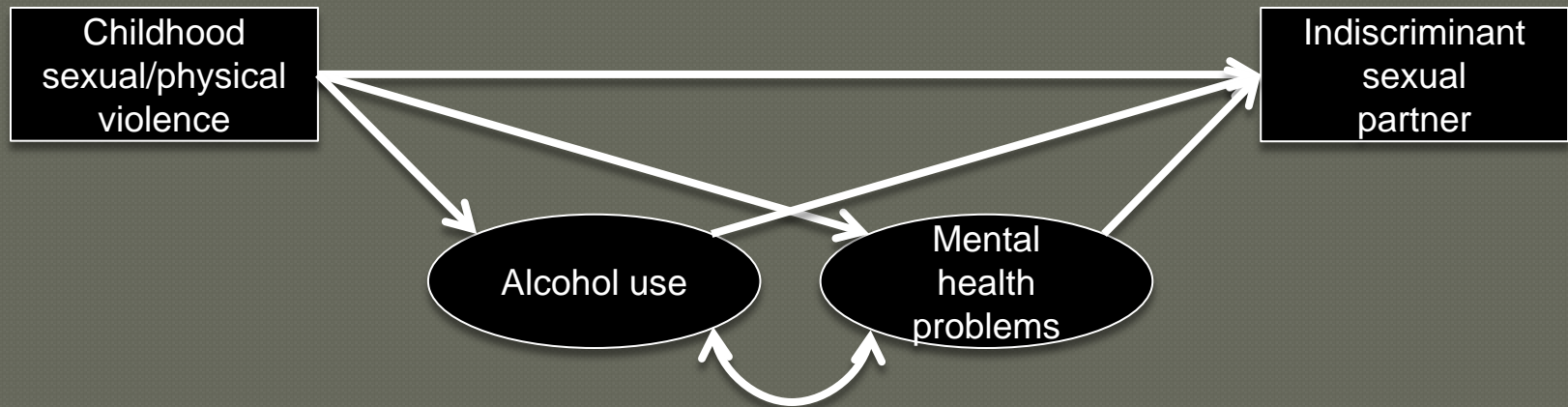
- ◉ Lack of studies examined structural associations between childhood experiences of sexual or physical violence, alcohol use, mental health problems, and risky sexual behaviors.
- ◉ Lack of studies examined racial/ethnic differences.

# Study Purpose

- To examine structural mechanisms between experiences of childhood sexual or physical violence and indiscriminant sexual behaviors by examining the cumulative roles of alcohol use and mental health problems among young adult women.

White

African American



# Racial/Ethnic Considerations

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- ◉ White women show higher prevalence rates of alcohol use than African American women.
- ◉ White women constitute the largest group of childhood violence survivors.
- ◉ White women are less likely to engage in risky sexual behaviors than African American women
- ◉ There are mixed findings in mental health problems.
- ◉ There are mixed findings in the associations between childhood experiences of sexual or physical violence, alcohol use, mental health problems, and indiscriminant sexual behaviors.

# Data Source and Sample

- 2008 National Longitudinal Study of Adolescent Health (Add Health) – wave 4 of in-home surveys
- A random sample of adolescents in grades 7–12 during the school year 1994/95 who completed in-school survey (wave 1)
- Followed them into young adulthood with 3 additional in-home surveys (waves 2 through 4)
- Publicly released data through Interuniversity Consortium for Political and Social Research (ICPSR)
- Add Health publicly released information of 6,504 adolescents in 1994–1995.
- Of 6,504 adolescents, 5,114 (78.6%) completed the wave 4.
  - Of 5,114 respondents completed the wave 4, 2,761 were women.

## Sample (women) (N=1,388)

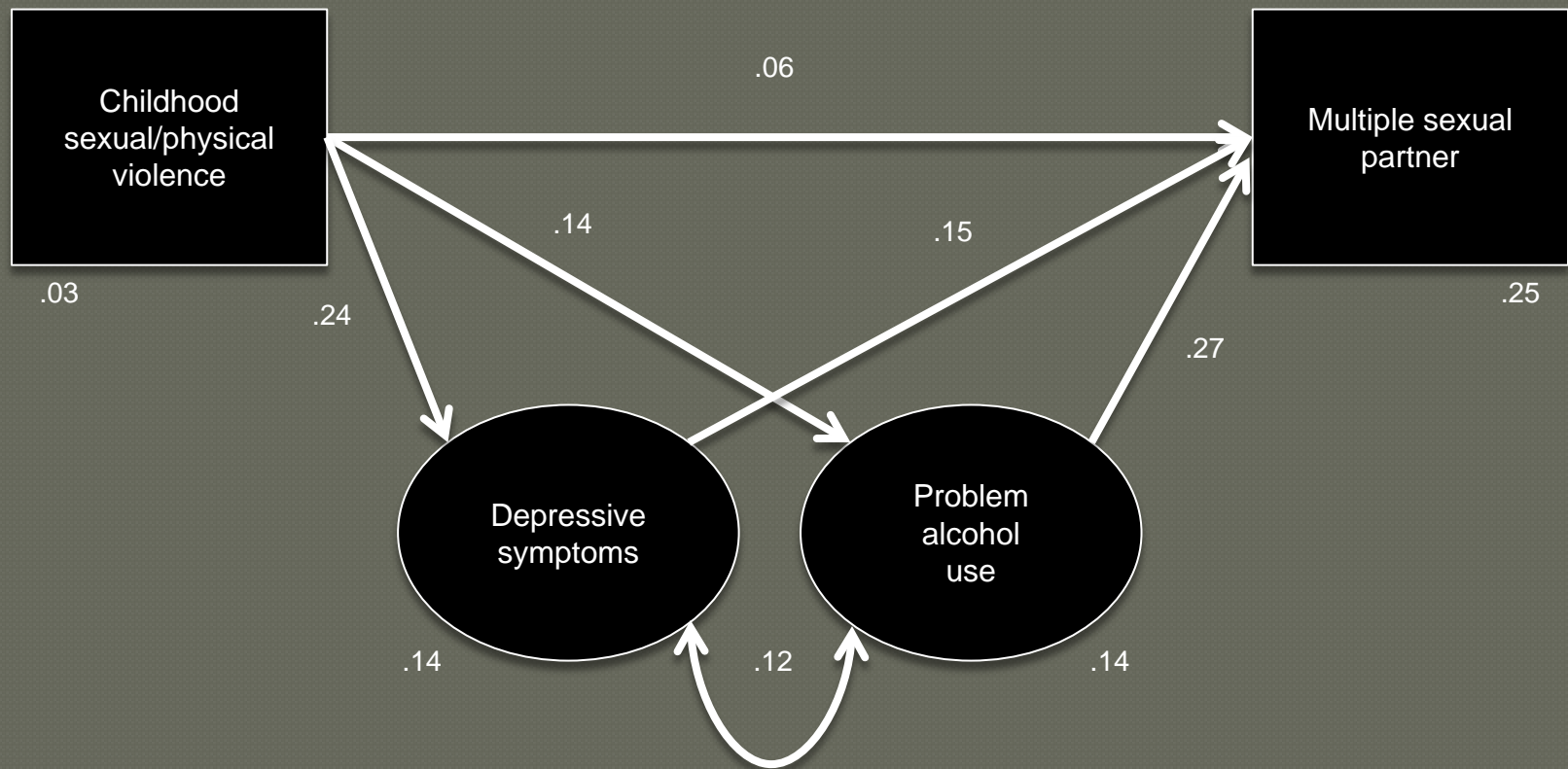
- 1) Non-Hispanic White or non-Hispanic African American
- 2) Those with valid sample weights of wave 4
- 3) Those who were sexually active



# Measure and Data Analysis

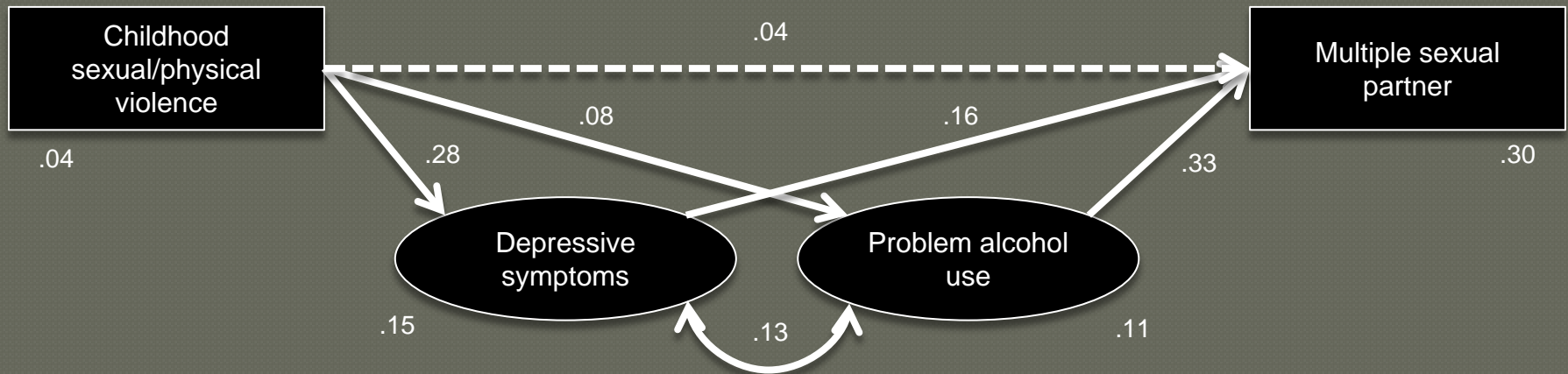
	Description
Childhood sexual/physical violence	Experience of sexual or physical violence before 18 <sup>th</sup> birthday
Problem alcohol use	Latent variable with 6 items : # days of binge drinking, # days of drunk days, 4 items of alcohol use problems
Depressive symptoms	Latent variable with 11 items of CES-D ( <b><math>\alpha = .84</math></b> )
Covariates	Age, marital status, education attainment, personal income
Study design	Cross-sectional
Analysis	Structural Equation Modeling (SEM) & Multigroup SEM
Model fit criteria	RMSEA, CFI, TLI, & Chi-square value with df
Racial/ethnic consideration	SEM using total sample and multigroup SEM using separate samples
Complex survey design effect	Including sample weights and cluster effect
Statistical Program	Mplus 6.21 and SAS 9.2

# Results (Total Sample)

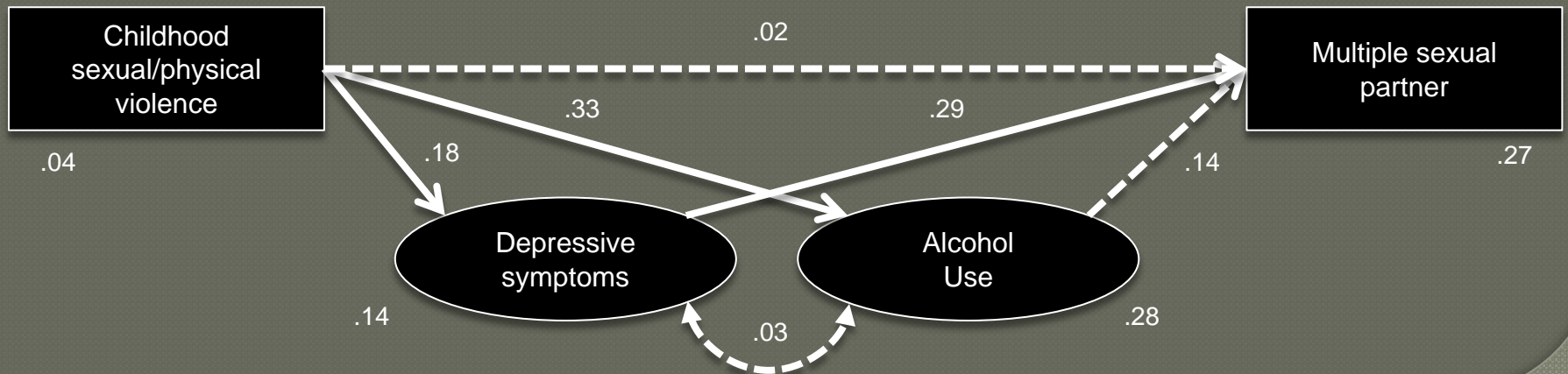


# Results (White and African-American Women)

Non-Hispanic white women (n=1,021)



Non-Hispanic African American women (n=367)



# Results (Multigroup SEM)

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- Overall model fit of the constrained-to-be-equal SEM showed a good fit of the data,  $\chi^2(567, 1,388) = 995.70, p < .001$ , RMSEA=.033, CFI=.974, TLI=.972.
- A chi-square difference test between the unconstrained ( $\chi^2(526, 1,388) = 927.68, p < .001$ ) and constrained-to-be-equal models indicated that the model differs significantly between White and African American women,  $\Delta\chi^2(41, 1,388) = 68.03, p < .01$ .
- From the process of constraining each of the path covariances and factor loadings, this study found that White and African American women showed significantly different path coefficient from the childhood sexual or physical violence to problem alcohol use,  $\Delta\chi^2(1, 1,388) = 6.15, p < .05$ .

# Discussion

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- This study effectively illustrates the vulnerability of survivors of childhood sexual/physical violence for engaging in risky sexual behaviors
- This study highlights the importance of providing effective and targeted treatment for women with experiences of childhood sexual/physical violence in order to limit negative consequences they experience.
- Effective and targeted screening, culturally competent interventions, and referrals are also necessary.

# Limitations and Future Studies

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- Measurement issues
  - Self-reported data
  - Retrospectively measured childhood violence
  - Binge drinking episodes
- Sample issues
  - Only White and African American women
- Future studies
  - Long-term effects on health outcomes such as risky sexual behaviors, revictimization, and/or pregnancy outcomes

# Thank you !!!

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- Drs. Beth C. Pomeroy, Diana M. DiNitto, Lori K. Holleran Steiker, Jane Carlisle Maxwell, & Catherine Cubbin at the University of Texas at Austin

