




Missing Data:

Inclusion of sexual and gender identity items on a general population survey



Allegra R. Gordon and Heather Batson
Philadelphia Health Management Corporation

APHA Annual Meeting ~ November 7, 2007





Overview: Key Questions

- What happens when a regional population-based survey includes questions on sexual identity and sexual partners?
- What does this LGB population look like?
- How does the self-identified LGB population overlap (and not) with those who report same sex behaviors?
- How do we begin to think about adding valid gender identity questions to population-based surveys?





Background

Sexual Orientation Qs & Population Surveys

- Previous population-based research on sexual minority populations has:
 - Identified important health disparities btwn LGBT and non-LGBT populations
 - HP2010 Companion Document, 2001; Institute of Medicine, 1999
 - Supported advocacy for equal access to and improved quality of care for LGBT populations
 - Demonstrated sexual behavior not a predictor of sexual identity and vice-versa
 - Laumann et al., 1997; Pathela et al. 2006





Methodology

Southeastern Pennsylvania Household Health Survey

- Cross-sectional telephone survey of health status, health behaviors, access to care
 - Population-based random-digit dialed sample
 - n=10,100 adults, ages 18+
- Fielded: June – Sept 2006
- Interviews conducted in English & Spanish
- Sample weights were constructed accounting for the respondents' age, gender, income, and race.





Key Measures

- Self-reported sexual identity
 - Which of these best describes you...
 - Heterosexual or straight,
 - Homosexual or gay,
 - Bisexual, or
 - Something else?
- Gender of sexual partners in past year
 - In the past year, have your sexual partners been male, female, or both?
 - Included (voluntary) response category: No sex partners / Not currently in sexual relationship





Sexual Identity & Gender of Sex Partners

Self-reported sexual identity

■ LGB-identified	2.1%	(n=201)
■ Heterosexual-identified	97.4%	(n=9,510)
■ "Something else"	0.5%	(n=52)
■ Decline to answer	1.2%	(n=116)

Gender of sexual partners, past year

■ Same-sex or both	2.5%	(n=248)
■ Different-sex partners	78.5%	(n=7,758)
■ No sex partners	17.0%	(n=1,683)
■ Decline to answer	1.9%	(n=190)





Gay/Lesbian and Bisexual Identity by Gender

	Gay/Lesbian n (%)	Bisexual n (%)	Total LGB Subgroup n (%)
Men	83 (65.9%)	28 (37.3%)	111 (55.4%)
Women	43 (34.1%)	47 (62.7%)	90 (44.6%)
Total	126 (100.0%)	75 (100.0%)	201 (100.0%)





Identity-Based Measure





LGB vs. Heterosexual Populations: Demographic Differences

No Differences By:

- Gender
- Race/Ethnicity
- Income

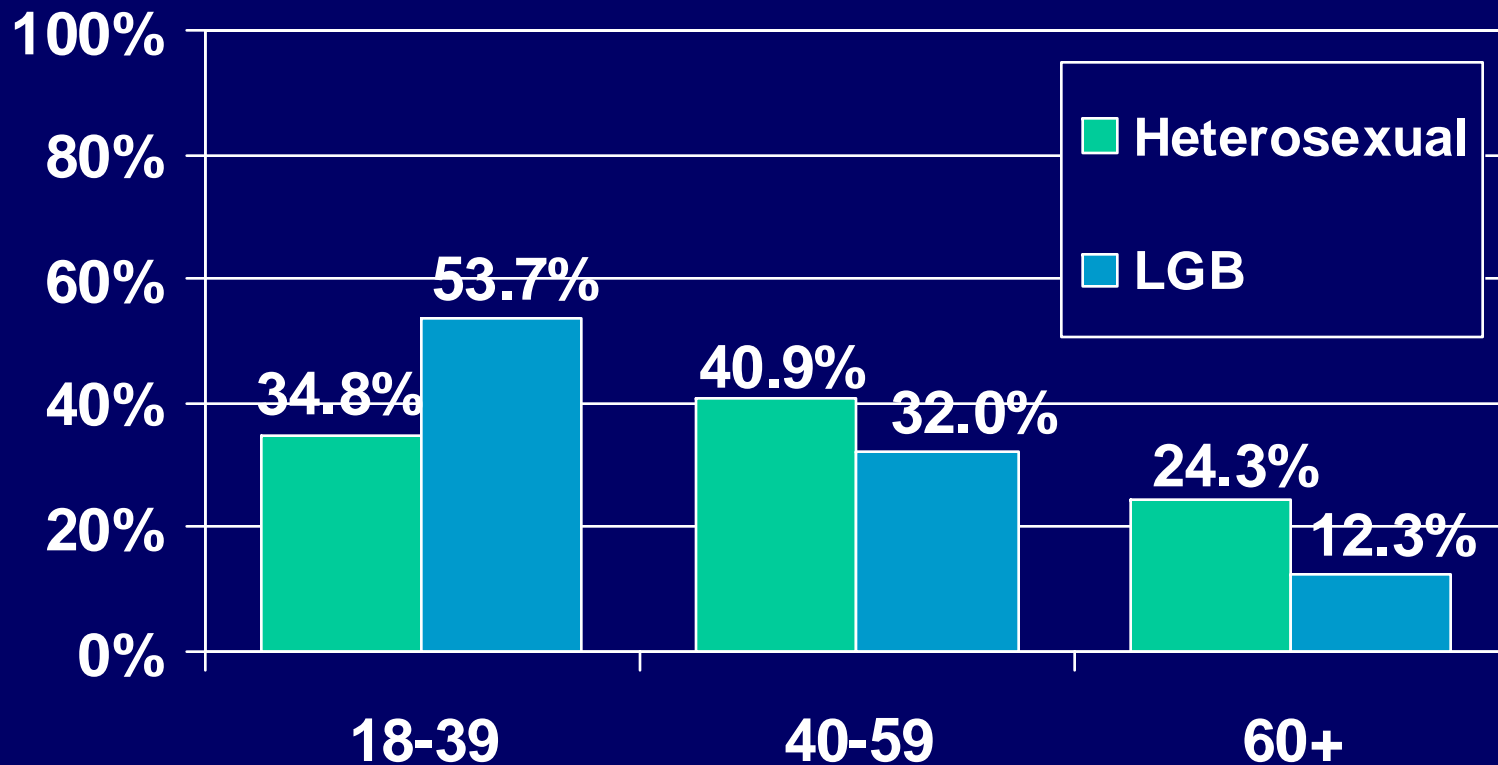
Significant Demographic Differences ($p < .01$):

- Age Group
- Marital/Partner Status
- Education Level
- Employment Status
- City vs. Suburbs





Figure 1. LGB and Heterosexual Adults, by Age Group (n=9714)

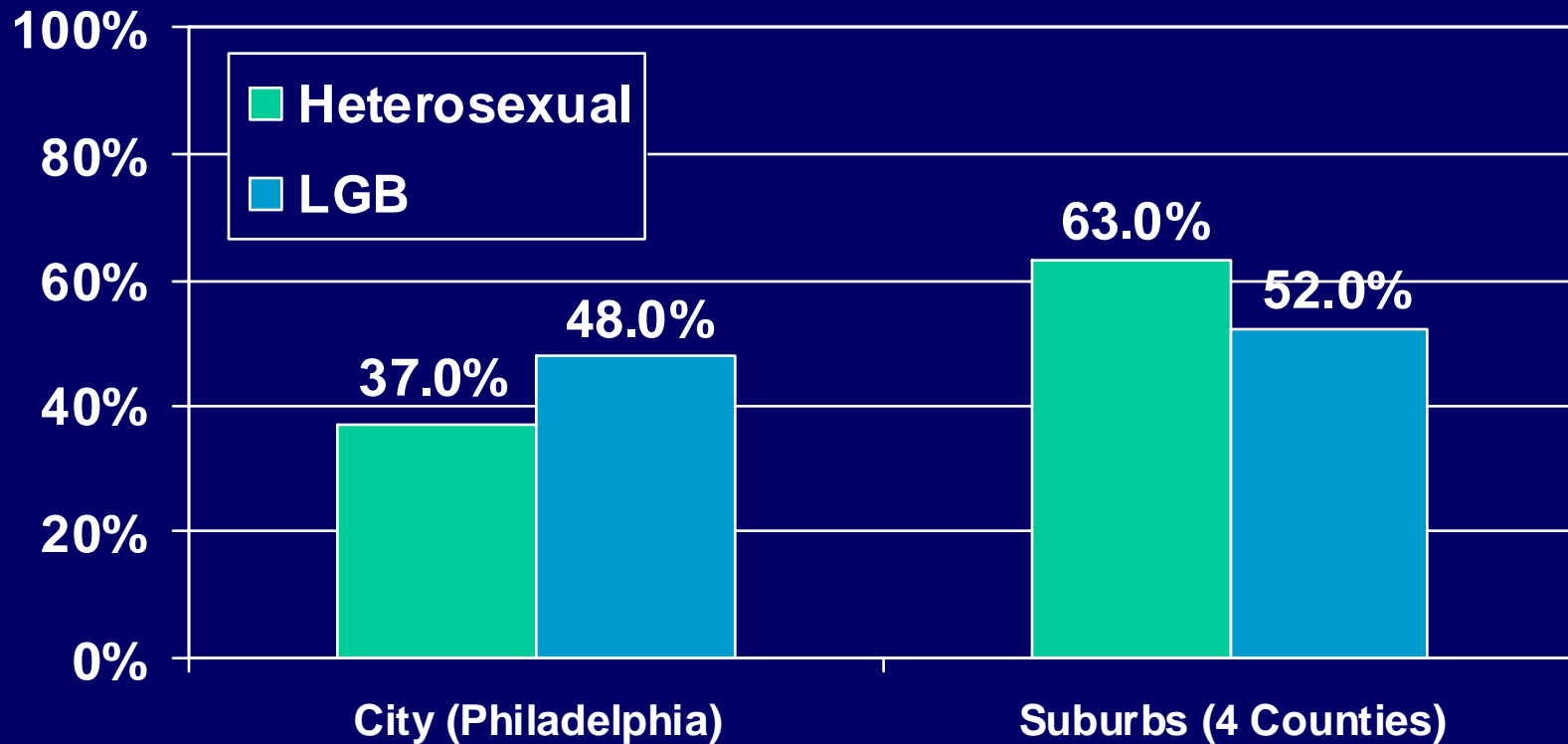


* These values are significantly different ($p < .001$)





Figure 2. LGB and Heterosexual Adults, by County of Residence (n=9693)



* These values are significantly different ($p = .001$)





Behavior-Based Measure





Gender of Sexual Partners: Demographic Differences

No Differences By:

- Gender
- Race/Ethnicity
- Education Level

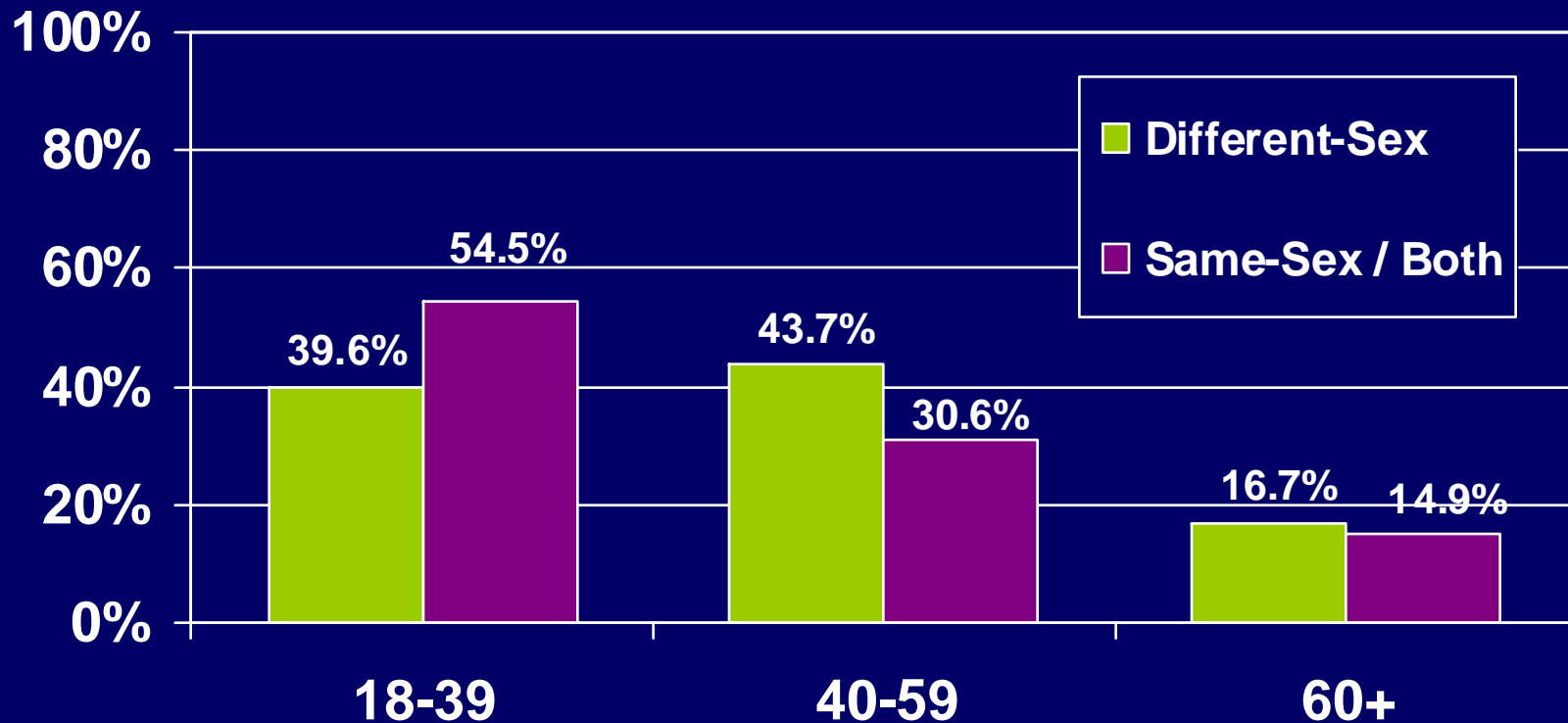
Significant Demographic Differences:

- Age Group
- Income
- Marital/Partner Status
- Employment Status
- City vs. Suburbs





Figure 3. Gender of Sexual Partners by Age Group (n=7802)

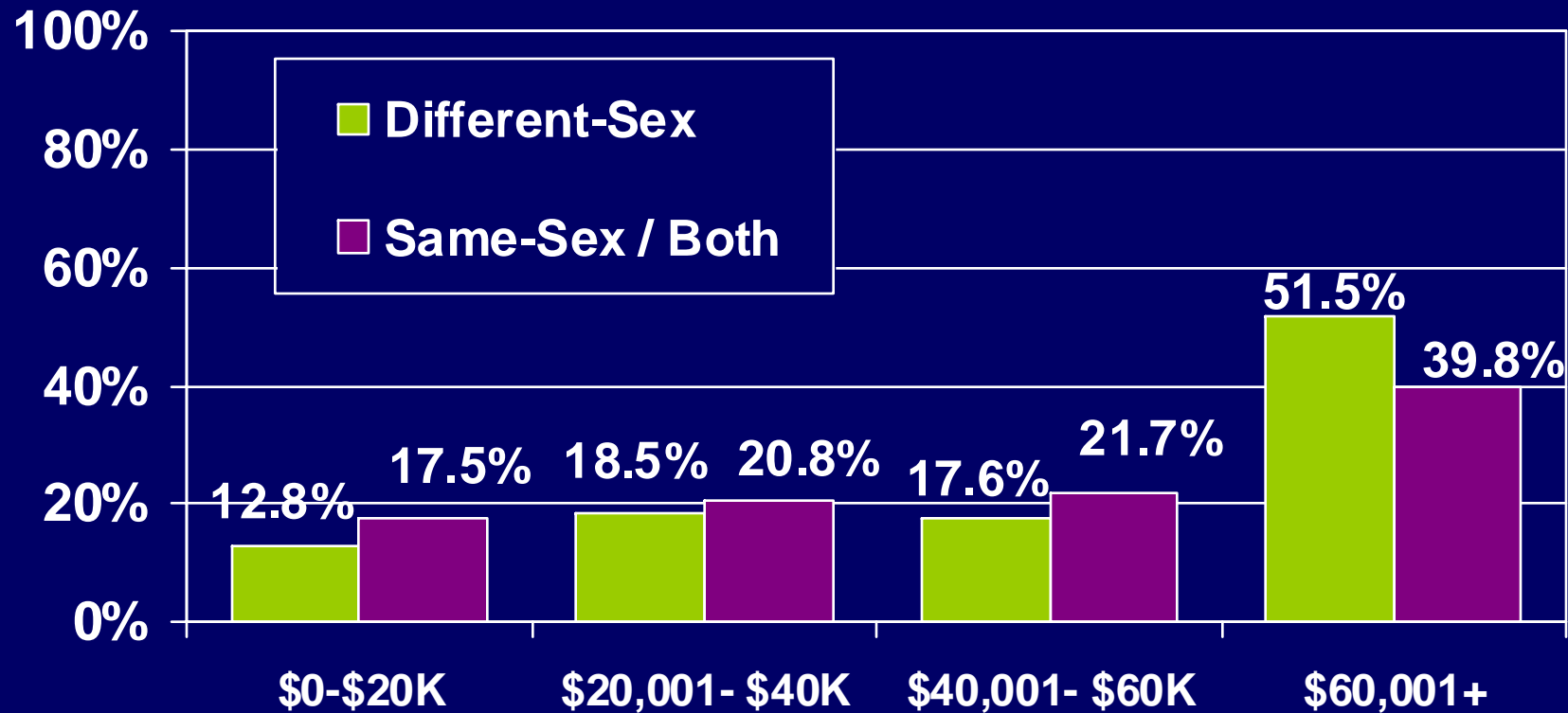


* These values are significantly different ($p < .001$)





Figure 4. Gender of Sexual Partners by Income Level (n=6902)



* These values are significantly different ($p < .01$)





Identity vs. Behavior: LGB-Identified vs. Non-LGB-Identified with Same-Sex Behaviors





LGB-Identified vs. Non-Identified: Demographic Differences

No Differences By:

- Gender
- Race/Ethnicity
- Marital/Partner Status
- City vs. Suburbs

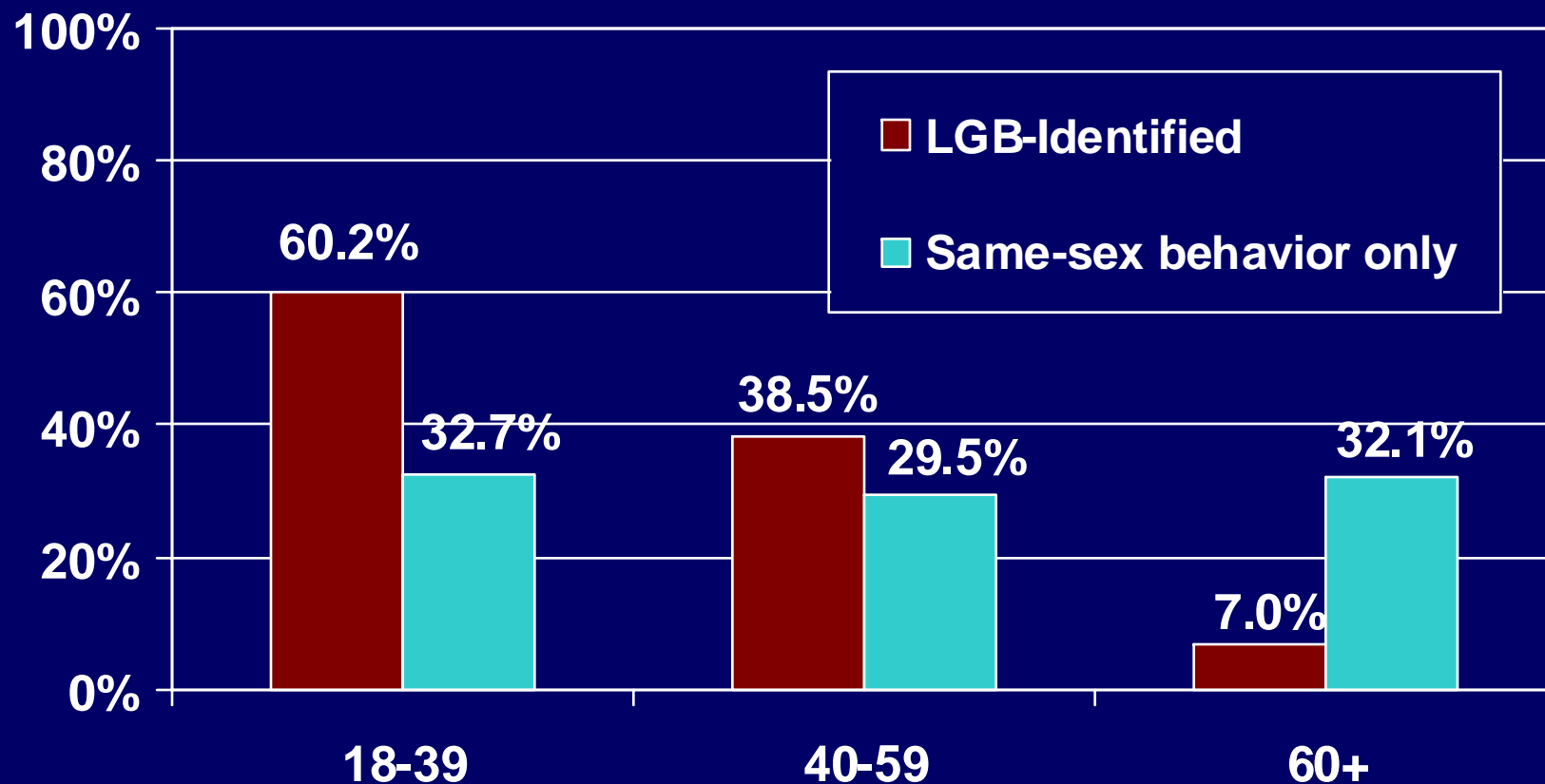
Significant Demographic Differences:

- Age Group
- Income
- Education Level
- Employment Status





Figure 5. LGB-identified and Non-identified by Age Group (n=248)

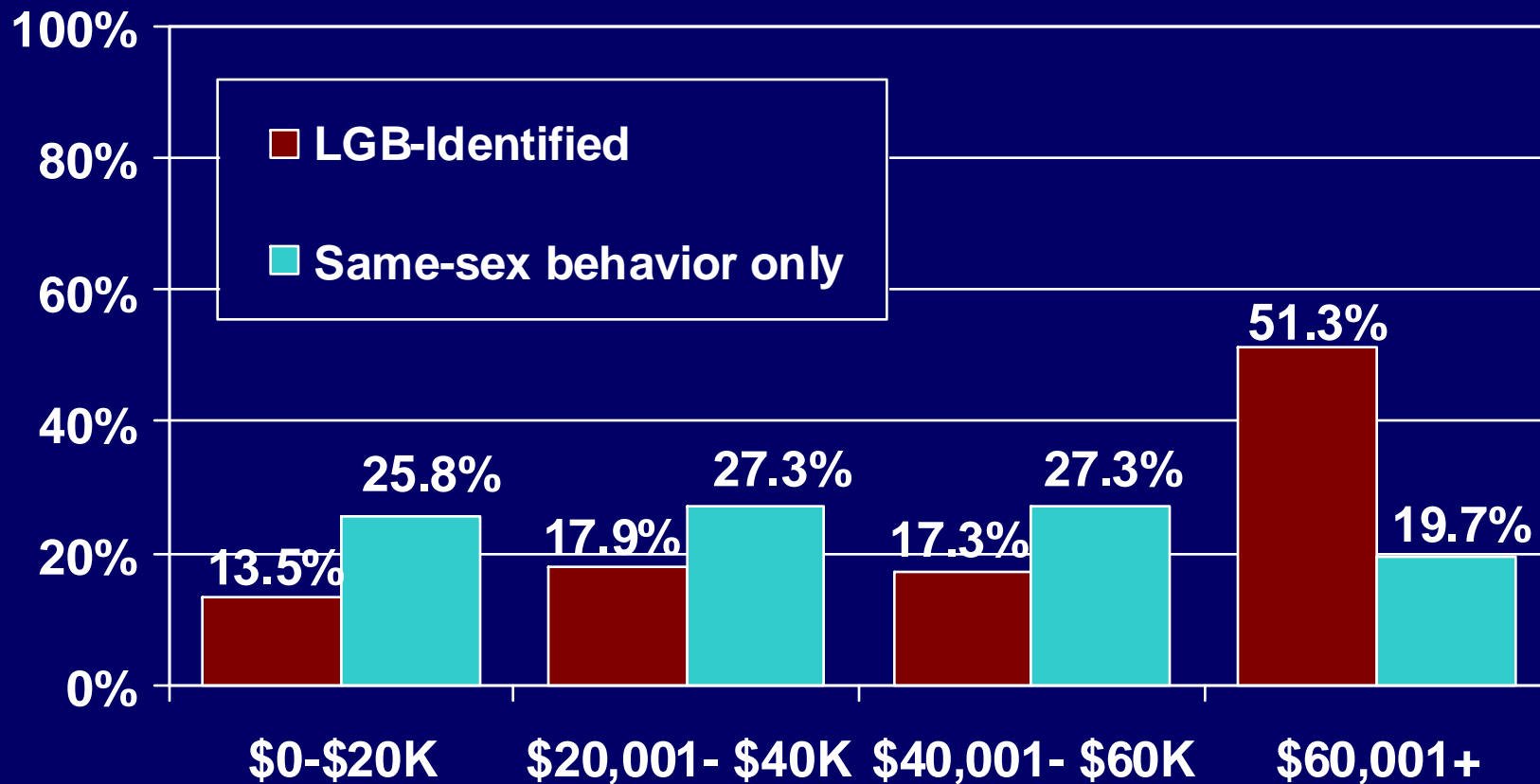


* These values are significantly different ($p < .001$)





Figure 6. LGB-identified and Non-identified by Income Level (n=248)



* These values are significantly different ($p < .001$)



Multivariate Analysis

Predictors of having same-sex partners but no LGB identity

Logistic Regression Odds Ratios (n=248, 95% CI, p<.05)

(Nagelkerke R Square=.31)

- Gender --NS--
- Age¹
 - 40-59 --NS--
 - (60+) 8.61 (3.34, 22.22)
- Education²
 - Some college .16 (.04, .62)
 - College degree + .13 (.04, .46)
- Race³
 - Latino --NS--
 - Black/African-American 2.44 (1.14, 5.23)

1. Compared to those 18-39 years old // 2. Compared to those with < High School/GED // 3. Compared to white respondents





Brief Exploration: Making Gender Explicit





Gender Identity & Sex at Birth Questions

- Self-reported sex at birth
 - What was your sex at birth...
 - Male,
 - Female, or
 - Other?
- Self-reported current gender
 - What is your present gender?
 - Man,
 - Woman,
 - Transgender, or
 - Other?





Findings: Self-Reported Gender Change

- No change in gender 9,834 (98.4%)
- Male at birth and presently a woman OR Female and birth and presently a man 29 (0.3%)
- Transgender or other 5 (<0.1%)
- Refused (birth or current) 114 (1.1%)
- Don't know birth sex 11 (0.1%)





Findings: Self-Reported Gender Change

- Among those who changed gender based on the 2 questions asked:
 - 14 born male, now women
 - 15 born female, now men

- Among those who identified as something other than men or women:
 - 1 born male, now transgender
 - 3 born female, now transgender
 - 1 born female, now 'other'





Limitations

- Telephone survey limitations
- Sample size
- Need more data on validity & reliability of sexual identity measures + questions differed from standard questions
- Gender identity questions new and untested; phone survey likely not the best method for reaching hidden, highly-stigmatized populations





Summary & Conclusions

- Some demographic differences found between:
 - LGB and heterosexual populations
 - Same/Both-sex sexual partners vs. different-sex sexual partners
 - LGB-identified and those with same-sex behavior but no LGB identity
- Importance of including both identity and behavior as both are likely determinants of opportunities and health outcomes
- Future directions: attention needs to be directed toward the collection of trans-inclusive gender information.





Acknowledgments

The Household Health Survey is made possible by the support of the Pew Charitable Trusts, the William Penn Foundation, and the United Way of Southeastern PA, as well as over 300 Data Base members and affiliates representing the health and human service community in Southeastern Pennsylvania.

We would also like to thank colleagues Francine Axler, Jennifer Lauby, Nicole Dreisbach, and Randy Sell for their comments and assistance.

Contact information:

Allegra Gordon: agordon@phmc.org

Heather Batson: heather@phmc.org

