

# Comparing Three Surveillance Methods Examining Tobacco Use in Missouri's LGB Population

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# Description/Rationale

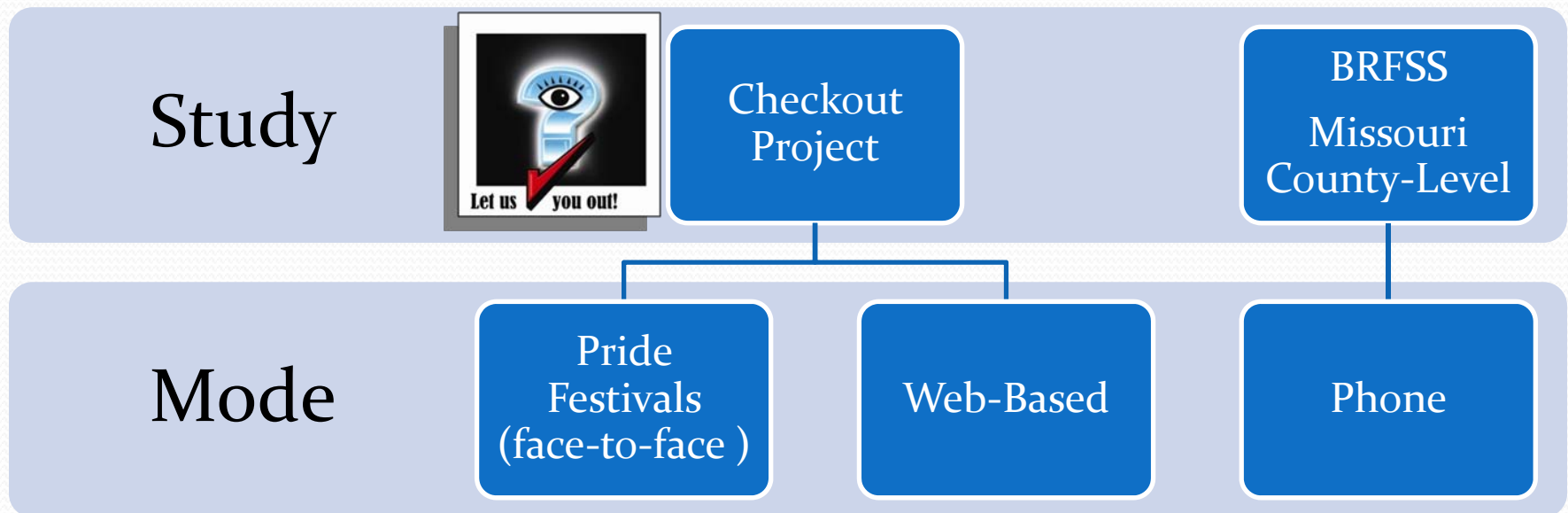
- CDC identifies lesbian, gay, bisexual (LGB) as a priority population for tobacco use
  - Heavily promoted → high initiation rates;
  - Low levels of quit attempts;
  - High levels of exposure to secondhand smoke;
  - All lead to high tobacco-related morbidity and mortality
- Overcoming challenges to assessing LGB tobacco use
  - Reach more LGB → greater generalizability
  - Develop reliable questions → higher quality data
    - Esp. Sexual orientation

# Presentation Objectives

- Describe assessment of populations at risk for health disparities related to tobacco use
- Compare measurements and findings of three recent studies of the LGB community in Missouri
- Discuss:
  - Pros and cons of each method
  - Implications for future assessment studies
  - Cessation and policy change interventions

# Compare studies of Missouri LGB

- Two studies using three modes to assess smoking in the LGB community in Missouri:



# Compare studies of Missouri LGB

- Each study assessed sexual orientation
- Each study used standard tobacco use question items
- Able to categorize a person as a current, former, or never smoker
- Each study has several additional comparable questions (demographic variables; opinions about smoking policies; dangers of tobacco use)

# Assessment Characteristics

	Pride Festivals	Web-Based	County Phone
Sample Strategy	Convenience	Convenience	Probabilistic
Survey Questions	Tobacco Focused Multiple Choice Standardized Items	Tobacco Focused Multiple Choice Standardized Items	General Health Multiple Choice Standardized Survey

- Resources

- Data collection – County phone involved massive investment
- Data use – Easier to get County phone than to collect yourself

# Methods

# Data Collection

- Checkout Project (2008)
  - Convenience sample of attendees at four Pride Festivals
  - Web-based survey distributed on selected list serves and web-sites
- County-Level (2007-2008)
  - Missouri County Level Study of Adult Tobacco Use and Related Chronic Conditions & Practices
  - Included BRFSS (Behavioral Risk Factor Surveillance System) questions
  - Simple disproportionate sampling (DSS) used for 107 of MO's 114 counties (approx 400 – 800 surveys per county)



# Comparable Demographic and Tobacco Questions

- Sexual orientation
- Age
- Race
- Education
- Employment status
- Current smoking status
- Perceived causes of various health problems from secondhand smoke exposure
- Harm to adults, children, and infants from secondhand smoke exposure
- Preference and rules for a variety of smoke-free environments

# Identifying Sexual Orientation

- Checkout Project vs County-Level

Pride Festivals & Web	County-level Phone
Regarding sexual orientation, do you consider yourself to be:	Do you think of yourself as:
a. Lesbian	a. Heterosexual or straight
b. Gay	b. Homosexual*
c. Bisexual	c. Bisexual
d. Queer → Dropped	d. Something else
e. Straight <del>X</del> Heterosexual	e. Don't know
f. Don't know/Not sure	f. Refused → Missing
g. Other	

\*County-Level: If interview thought person was male, then asked b. homosexual or gay  
if female, then asked b. homosexual or lesbian

# Addressing *small* variations in tobacco question wording

Pride Festivals & Web-Based	County-Level Phone
What is your personal preference about smoking? Would you prefer smoking to be allowed in all areas, some areas, or not at all? <b>Public buildings</b>	In <b>public buildings</b> , do you think that smoking should be allowed in all areas, allowed in some areas, or not allowed at all?
a. Not at all	a. Allowed in all areas
b. Allow in some areas	b. Allowed in some areas
c. Allow in all areas	c. Not allowed at all
d. Don't know/Not sure	d. No opinion/Don't know
	e. Refused → Missing

# Addressing *moderate* variations in tobacco question wording

Pride Festivals & Web-Based	County-Level Phone
Smoke from other people's cigarettes is harmful to adults.	Do you think that breathing smoke from other people's cigarettes is:
a. Strongly agree	a. Very harmful to one's health
b. Agree	b. Somewhat harmful to one's health
c. Neither agree or disagree	c. Not very harmful to one's health
d. Disagree	d. Not harmful at all to one's health
e. Strongly disagree	e. No opinion/Don't know
	f. Refused
	Missing

# Addressing *large* variations in tobacco question wording

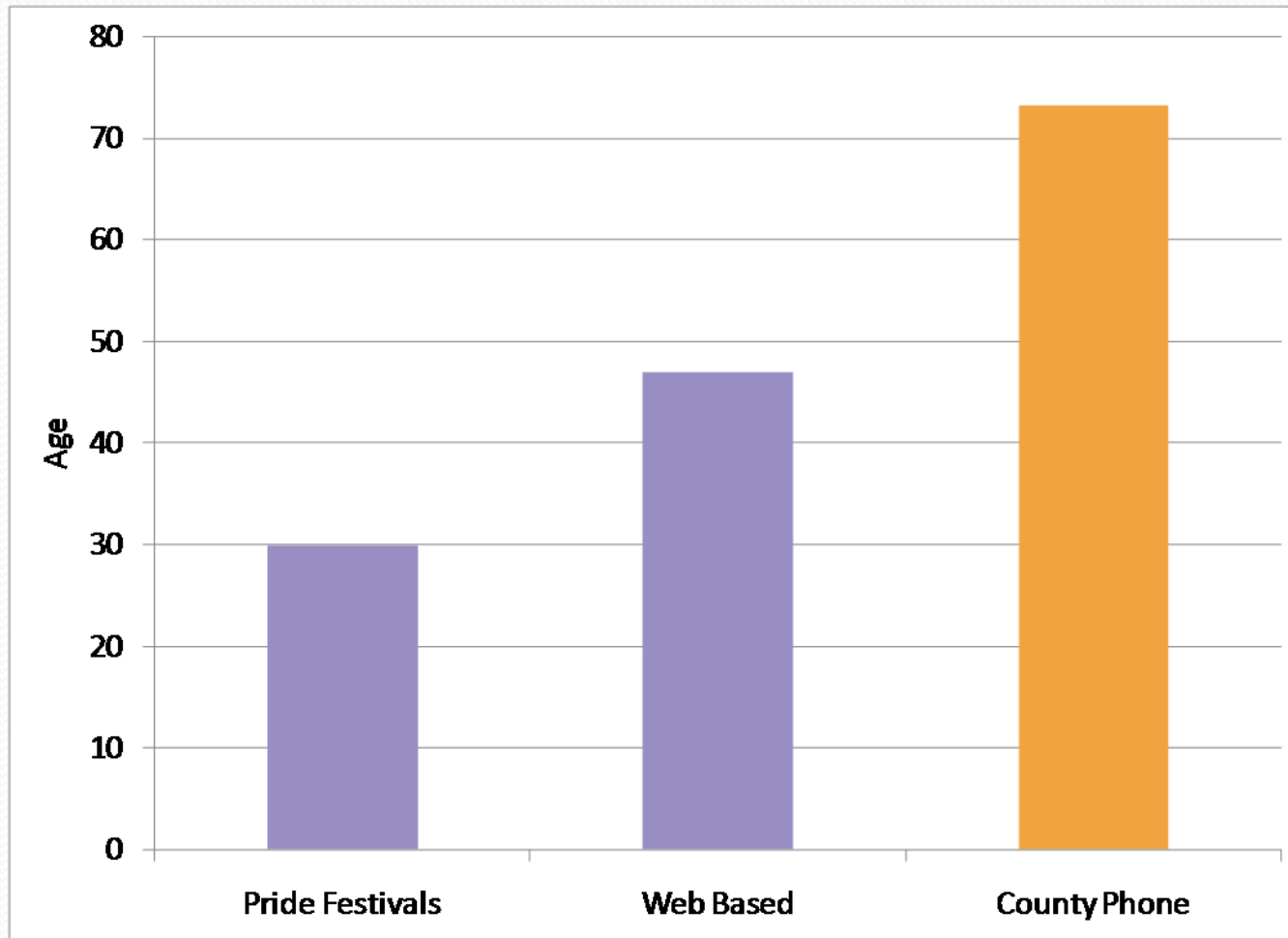
Pride Festivals & Web-Based	County-Level Phone
Constant exposure to secondhand smoke – at work or at home – almost doubles the risk of heart attack.	Please tell me whether you believe secondhand smoke is a cause of this condition. Heart disease in adults.
a. Strongly agree	a. Yes
b. Agree	b. No
c. Neither agree nor disagree	c. Don't know
d. Disagree	d. Refused
e. Strongly disagree	Missing

# Results

# Sexual Orientation

	Pride Festivals & Web	County-Level Phone
Lesbian	970	123
Gay	910	111
Bisexual	342	222
Queer	86	0
Straight/Heterosexual	507	45319
Don't know/Not sure	36	1317
Other	36	722
Refused	0	1495

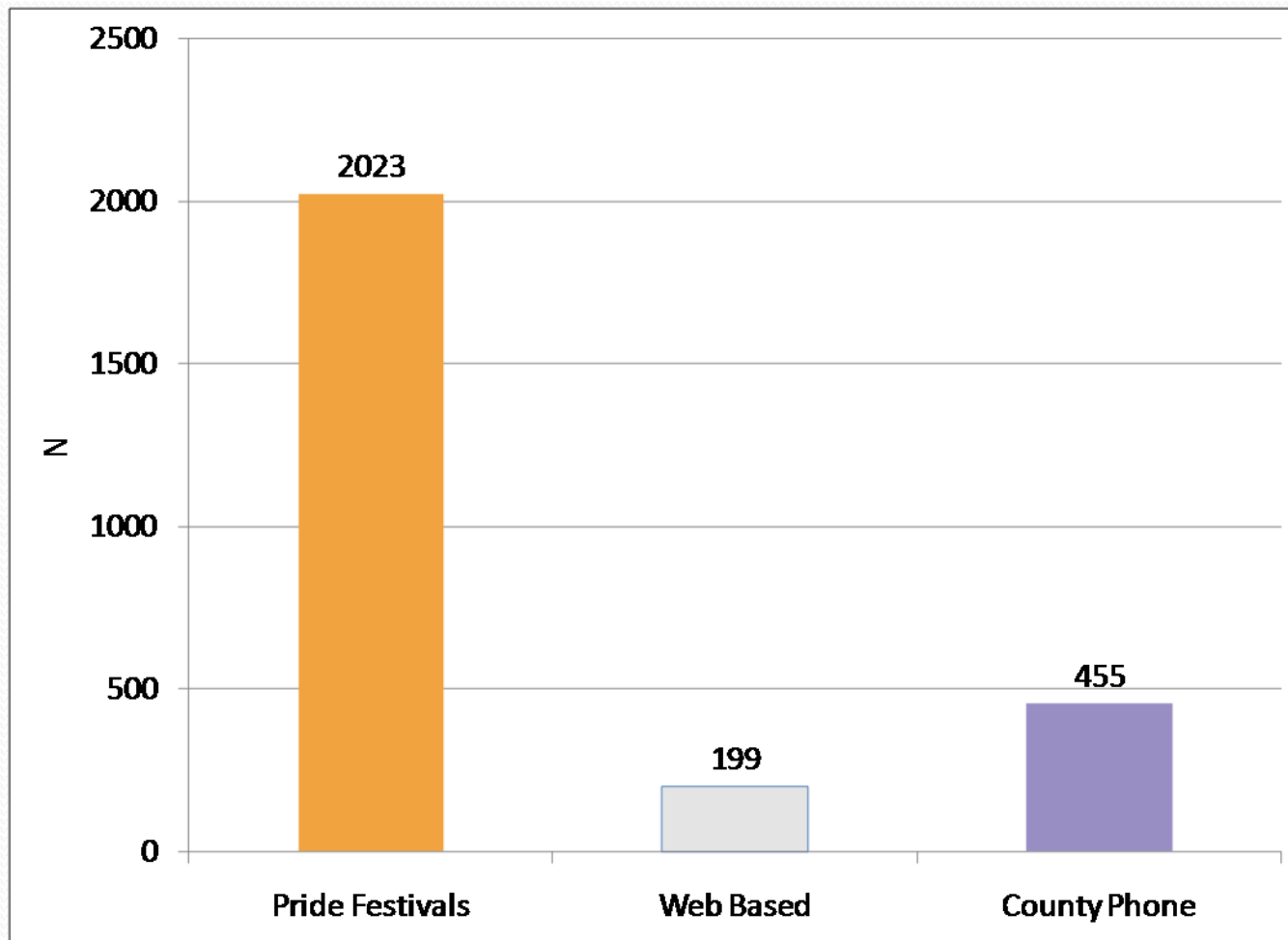
# Don't Know/Other & Age



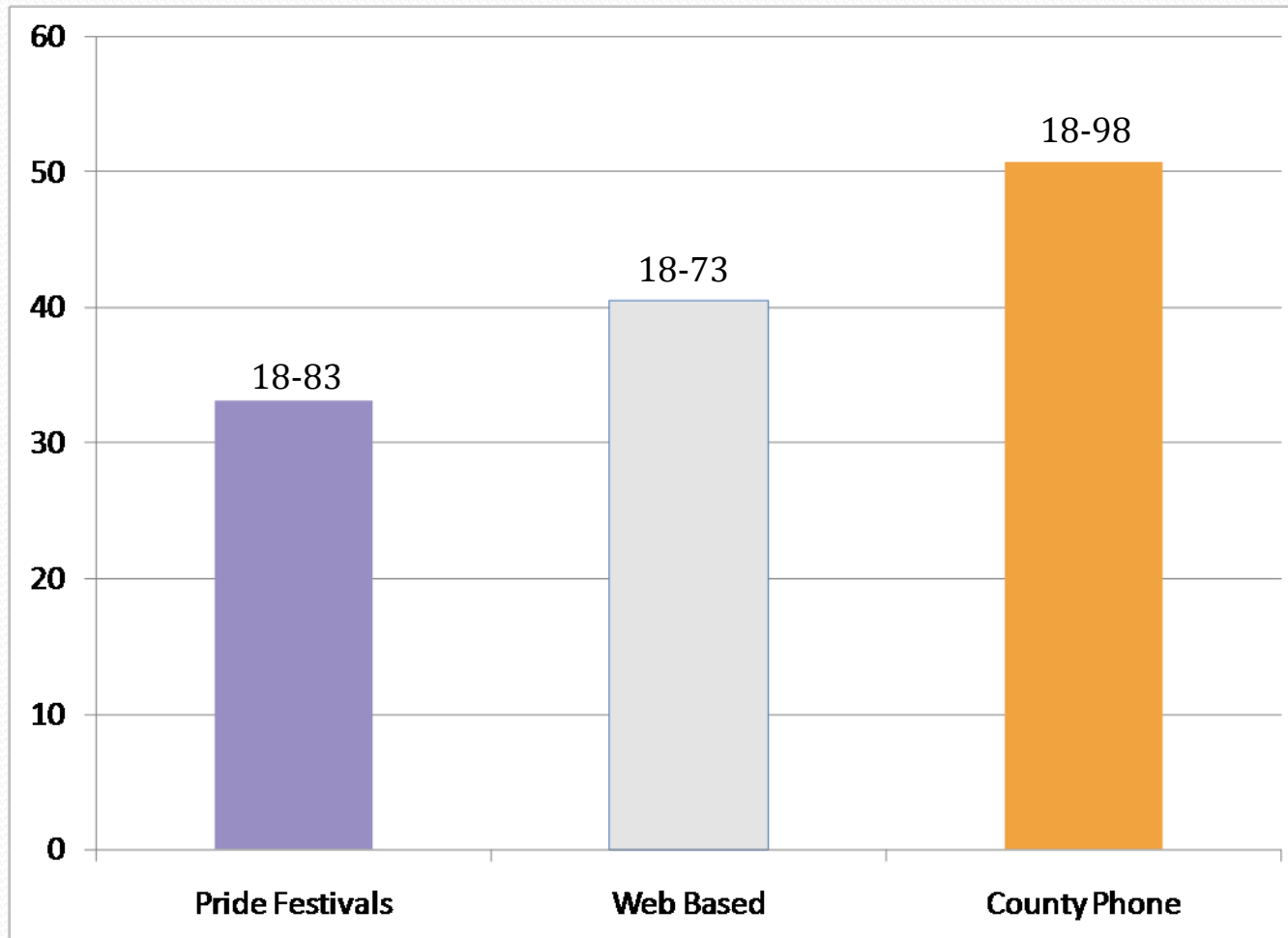
$F(2, 2095) = 354.88$   
 $p < .001$



# Sample Sizes (LGB Only)



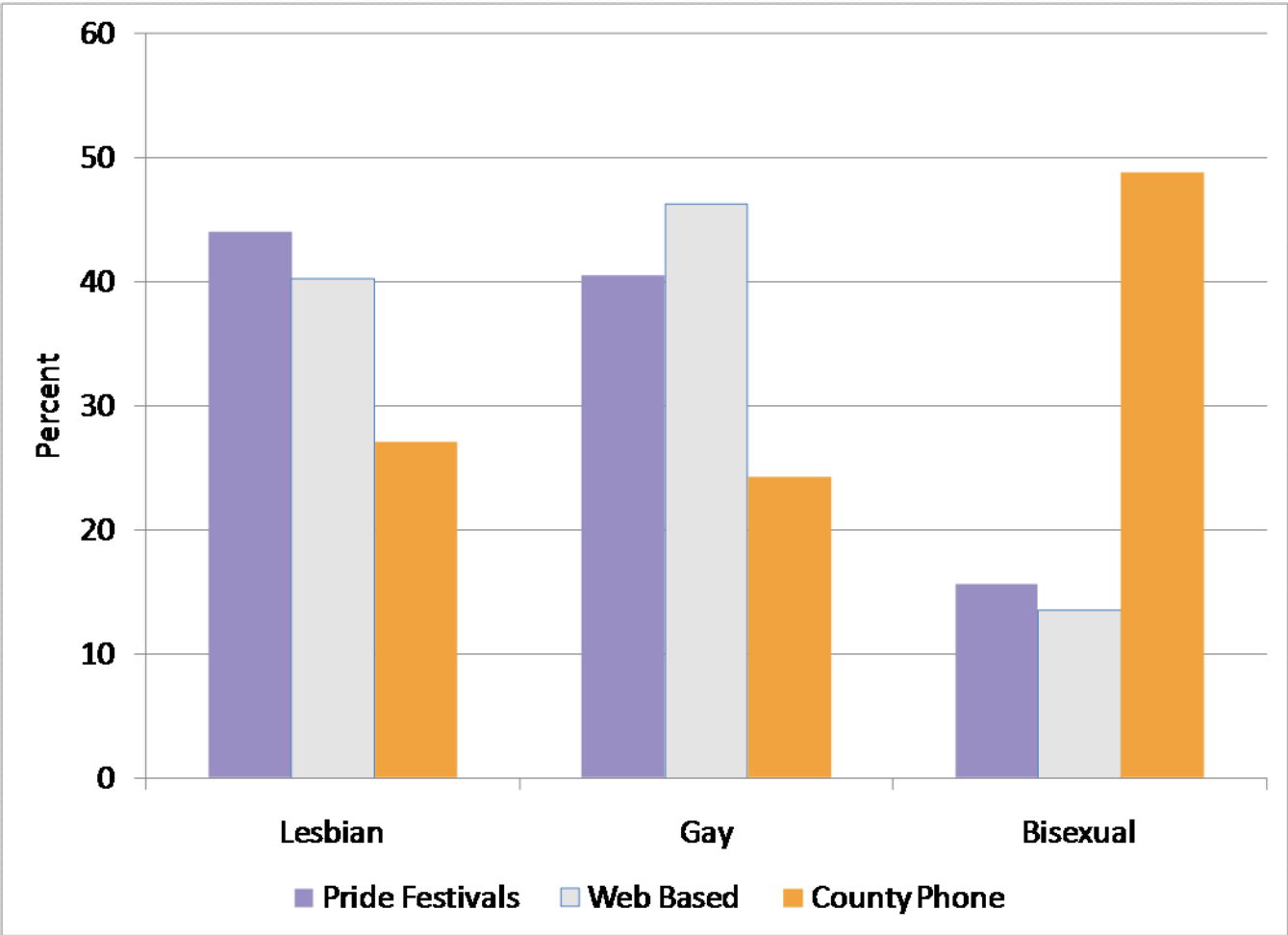
# Average age of the samples



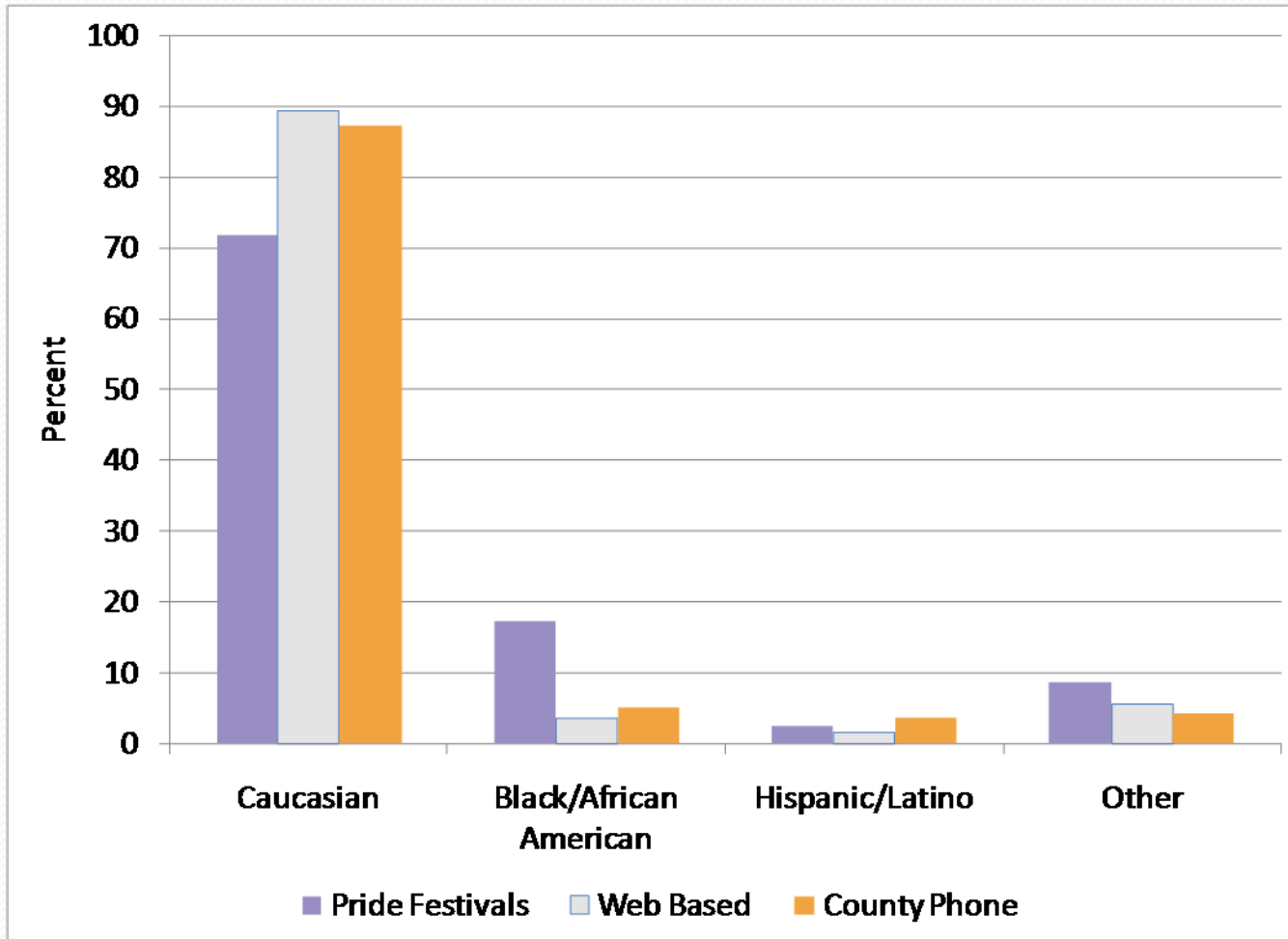
Median MO age =  
40

$F(2, 2674) = 318.80$   
 $p < .001$

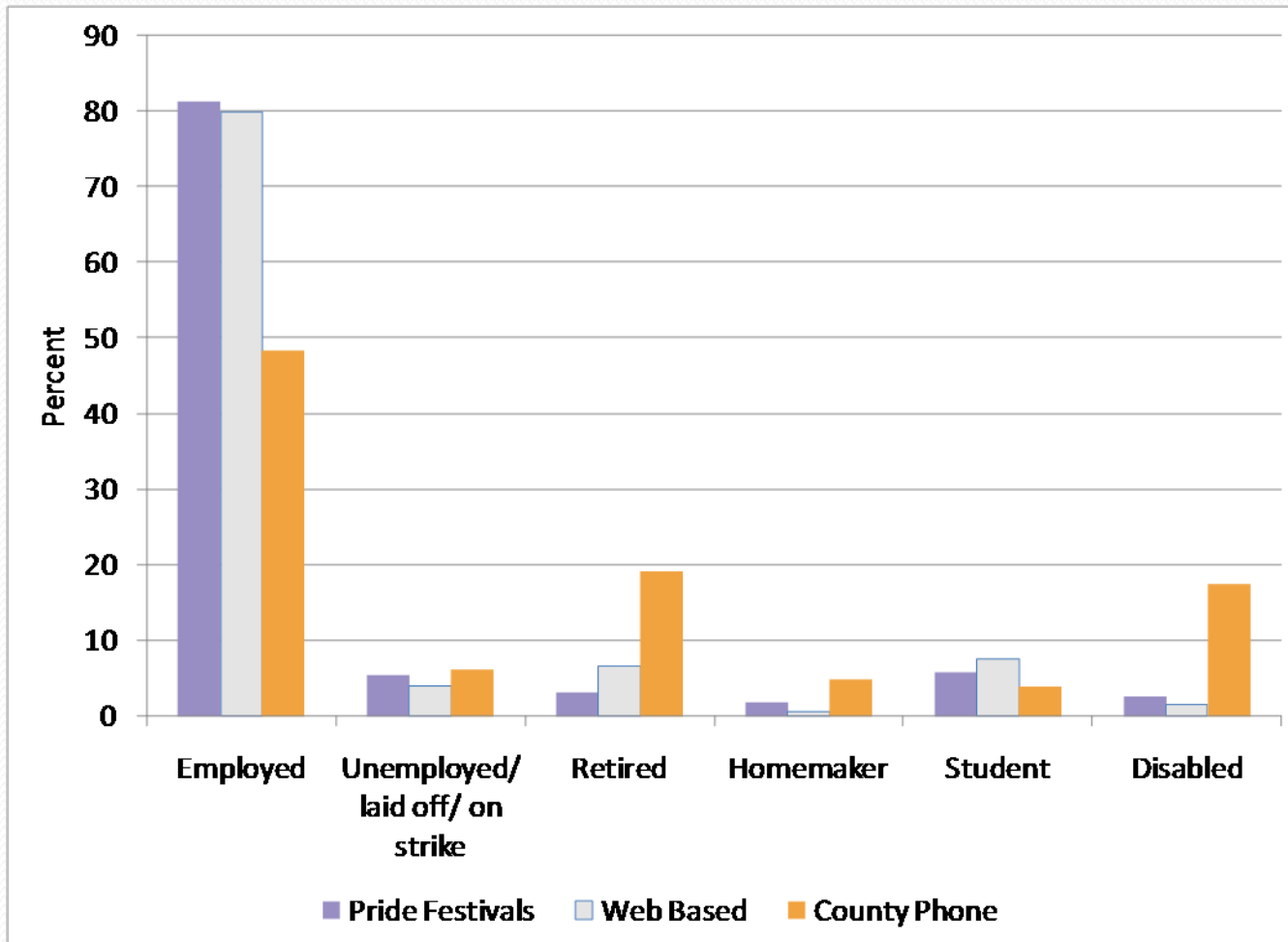
# Percent of sample in each study method by sexual orientation



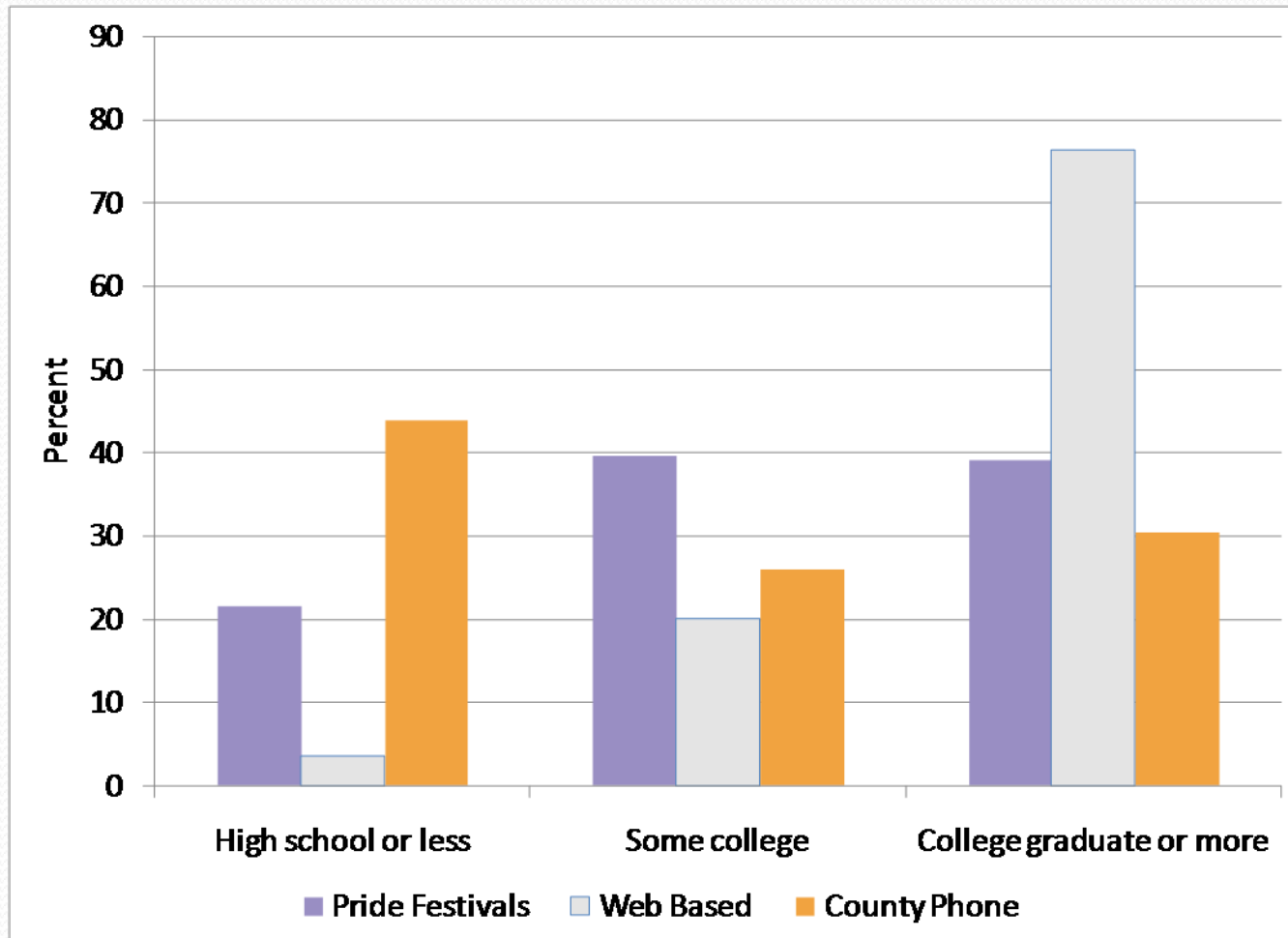
# Percent of sample in each study method by race



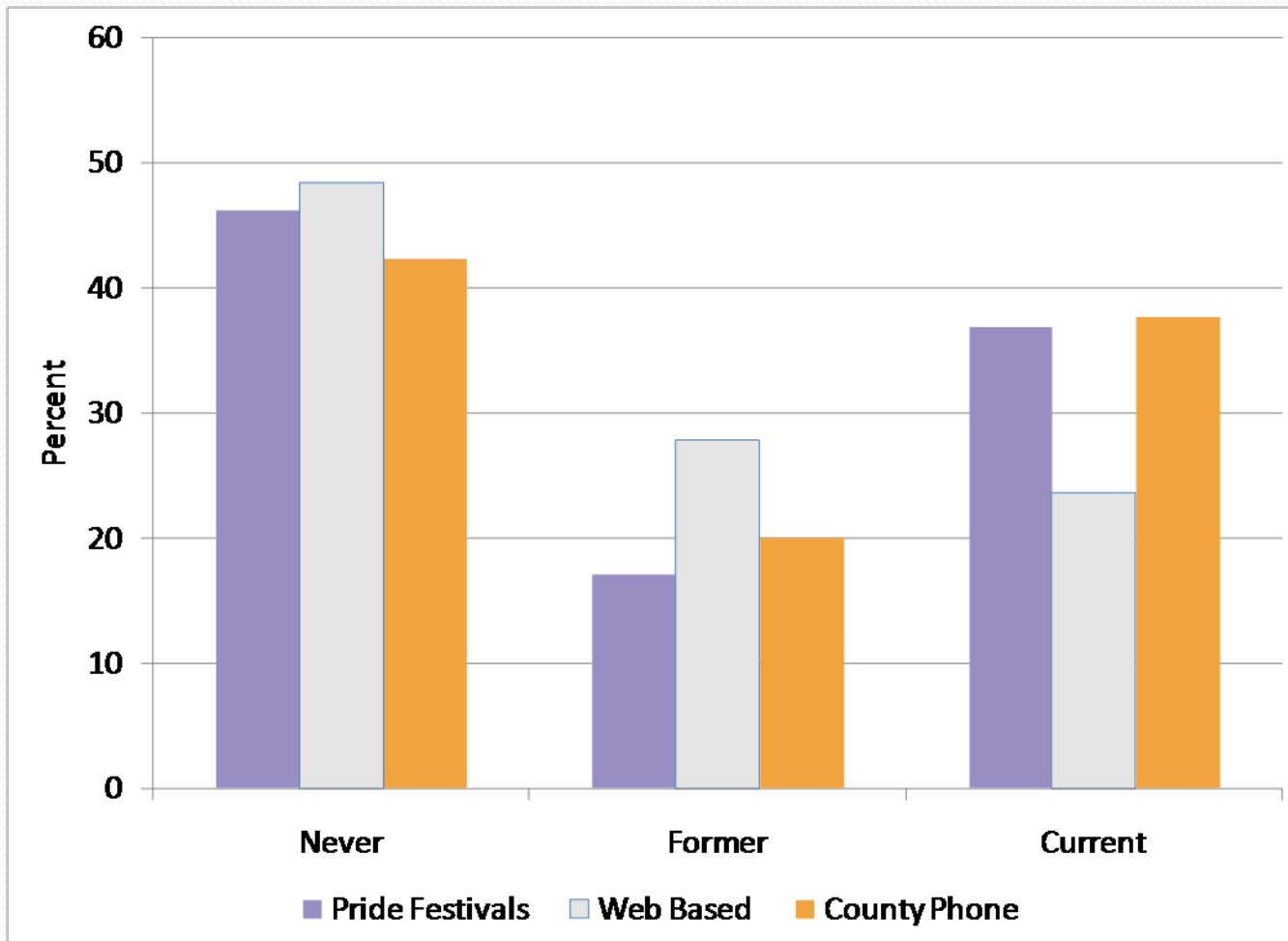
# Percent of sample in each study method by employment status



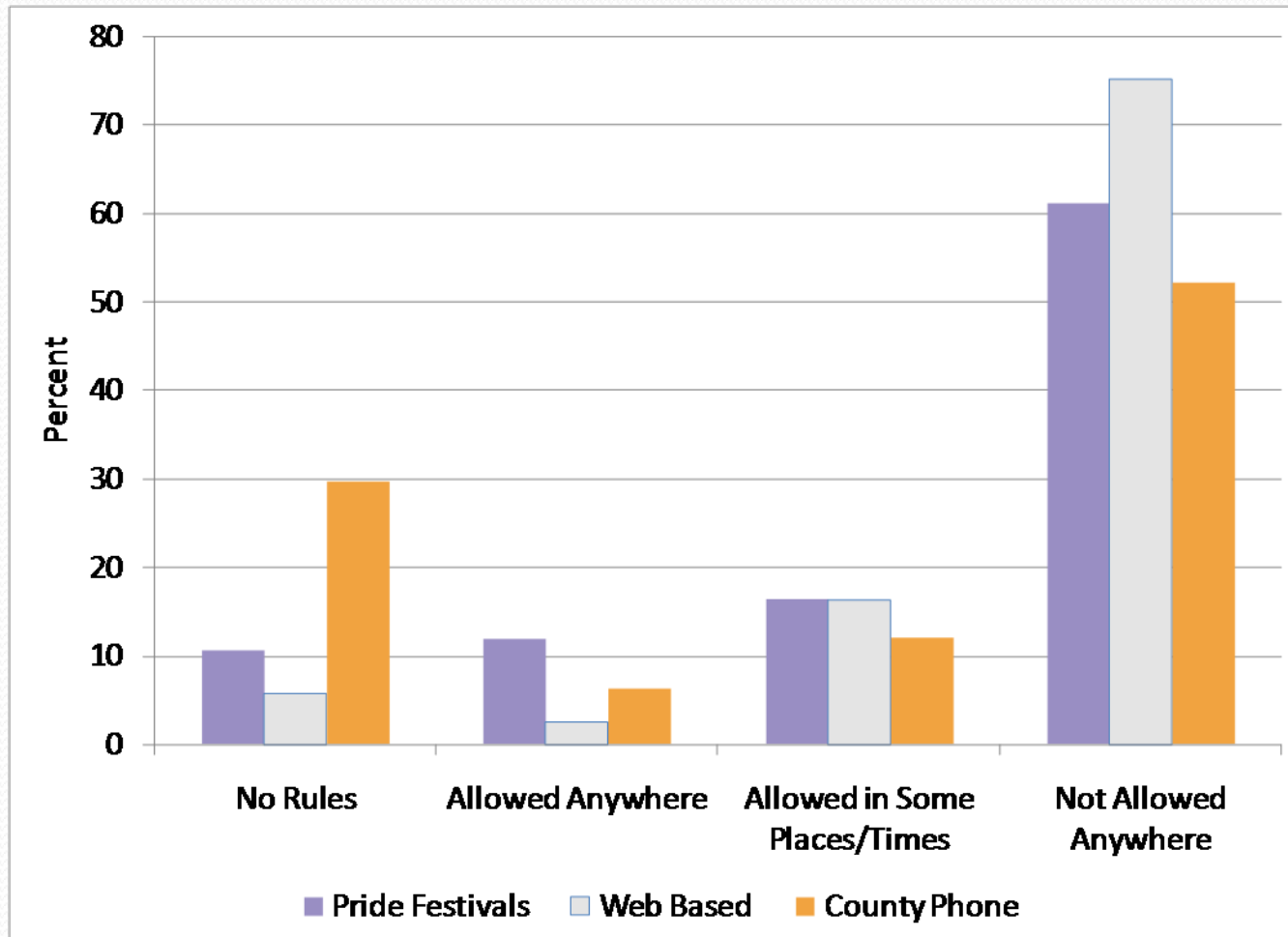
# Percent of sample in each study method by education



# Smoking Status

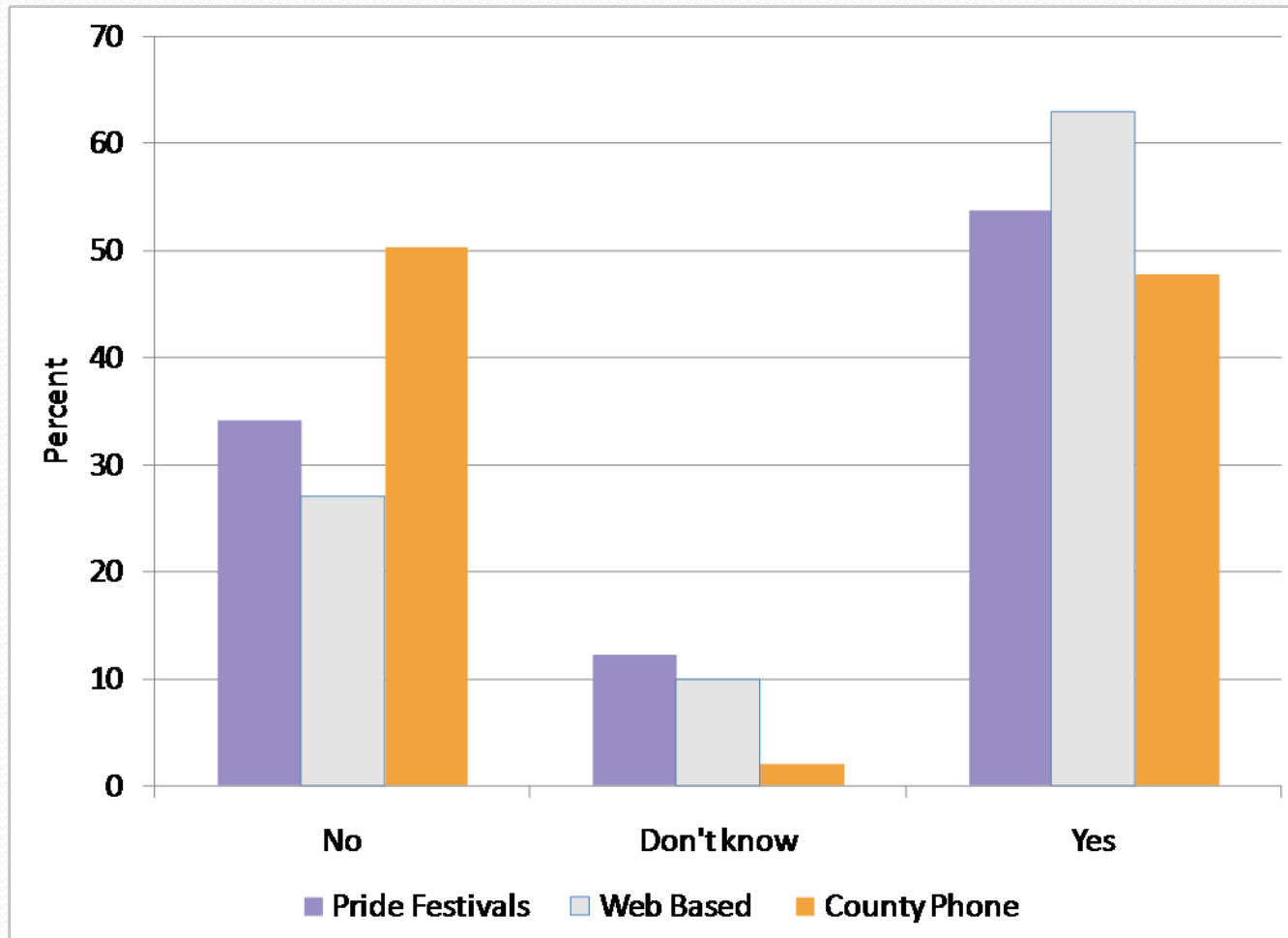


- Which statement best describes the rules about smoking inside your home?

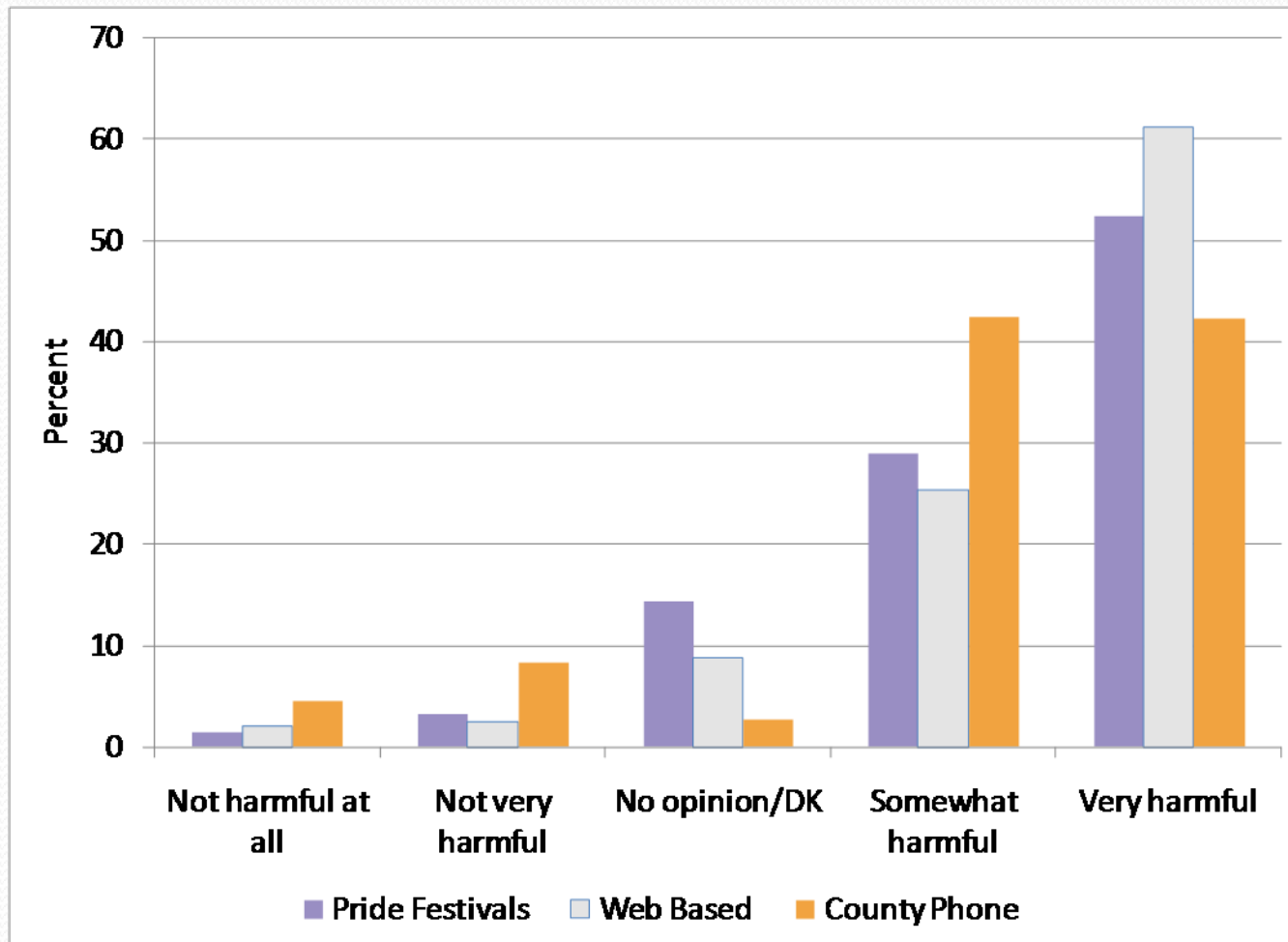




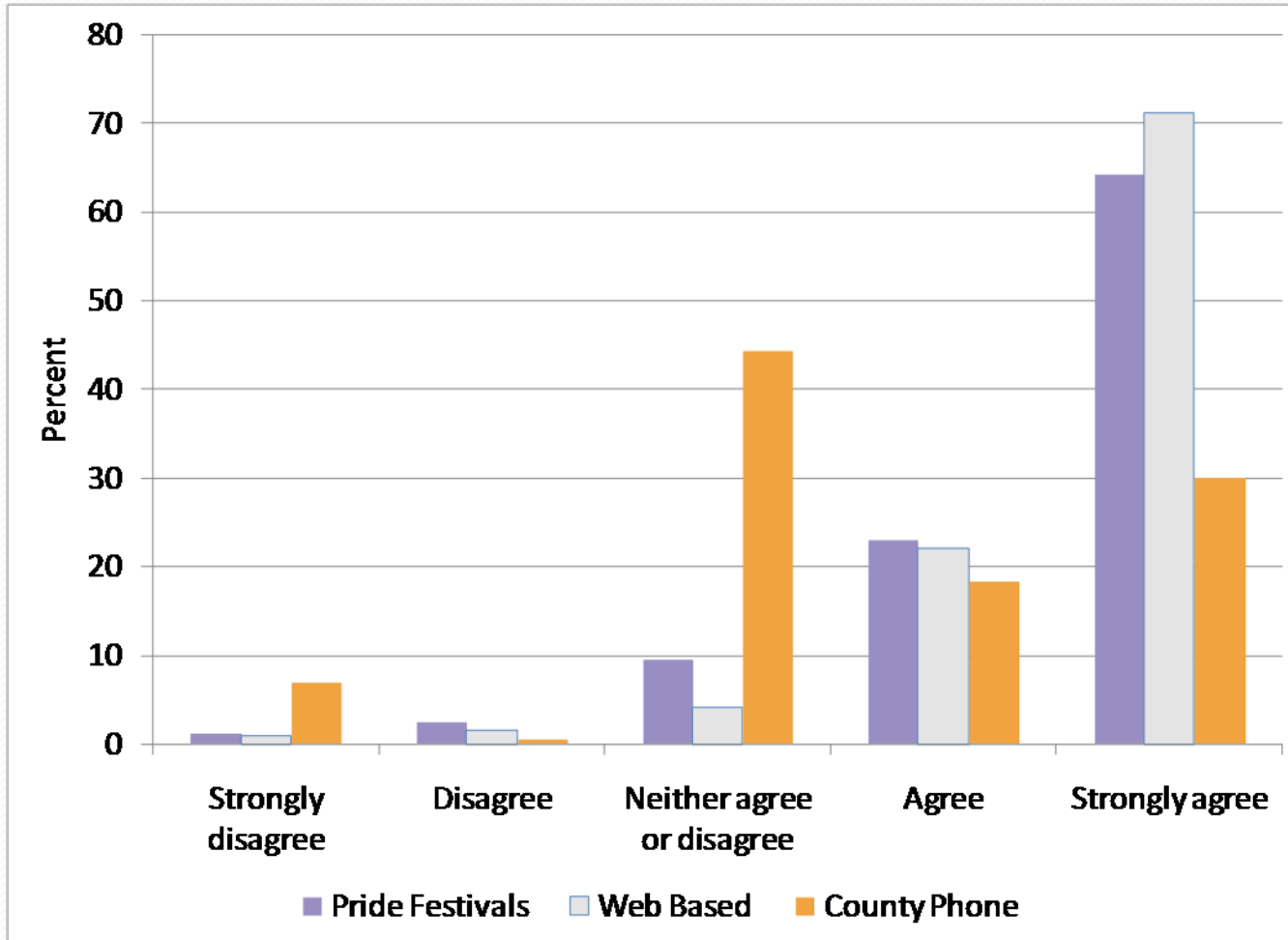
- Would you support smoke-free policies in all indoor workplaces, restaurants and bars?



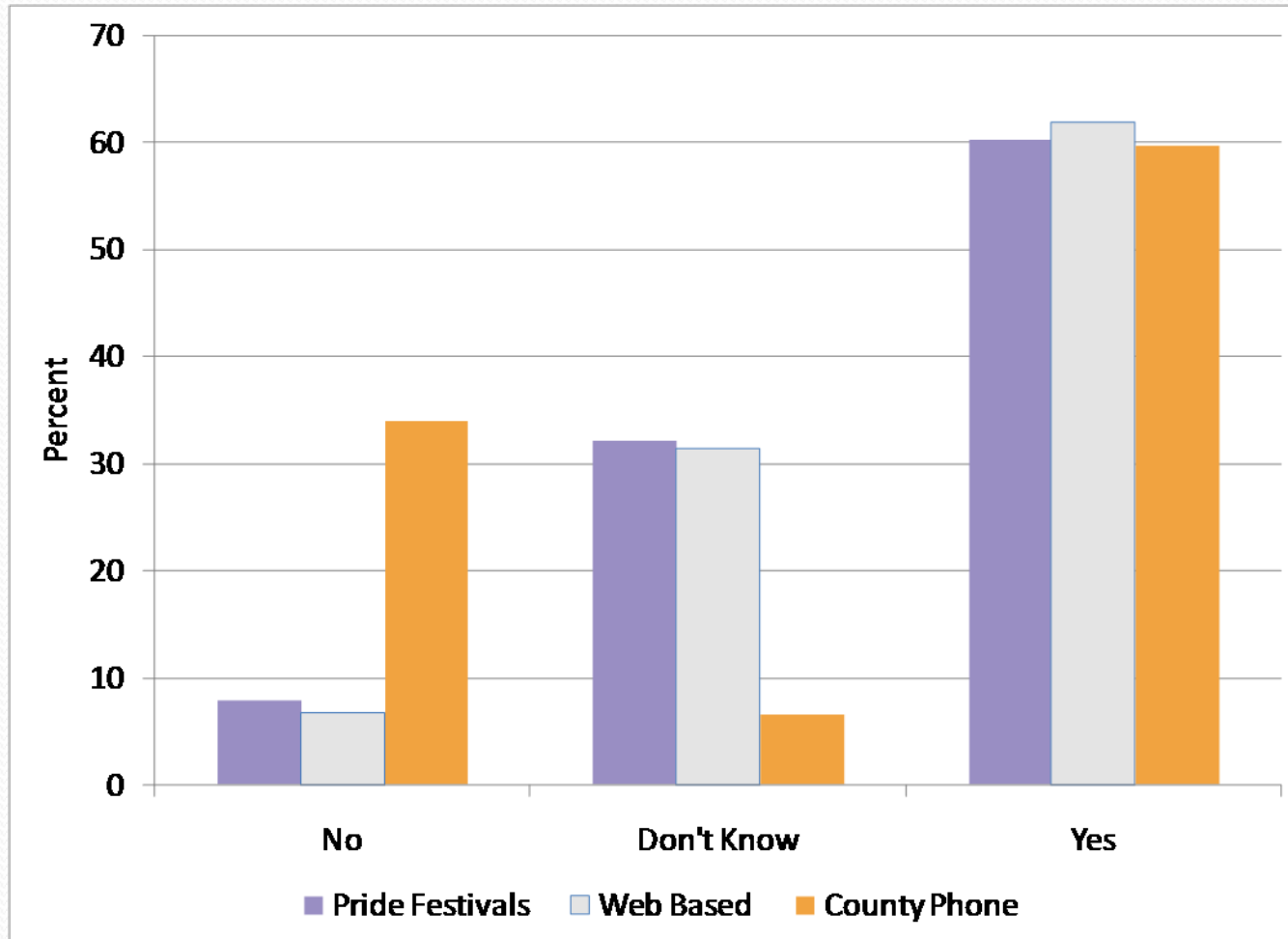
- Do you think breathing smoke from other people's cigarettes is harmful to one's health?



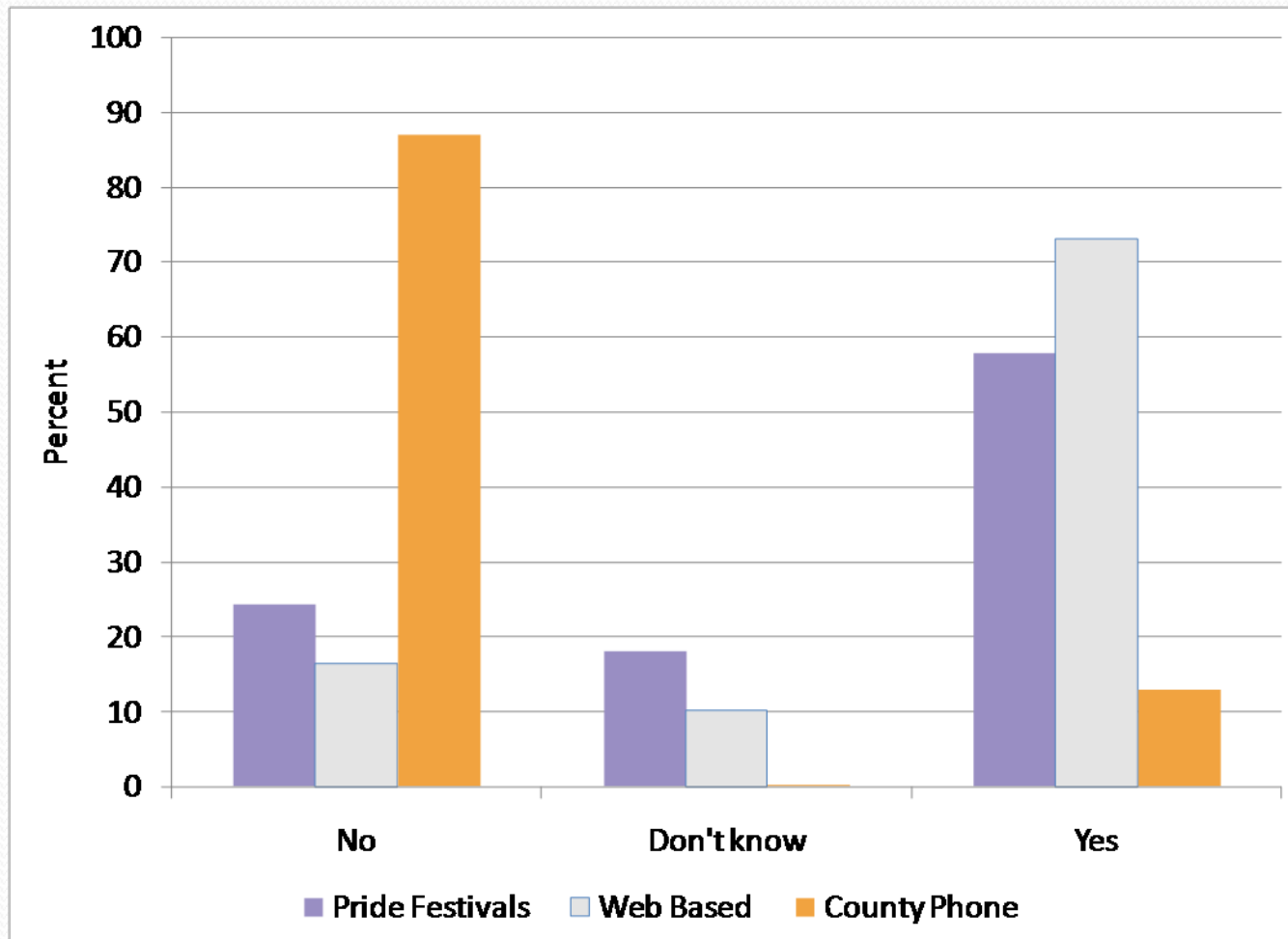
- Secondhand smoke is harmful to children & infants



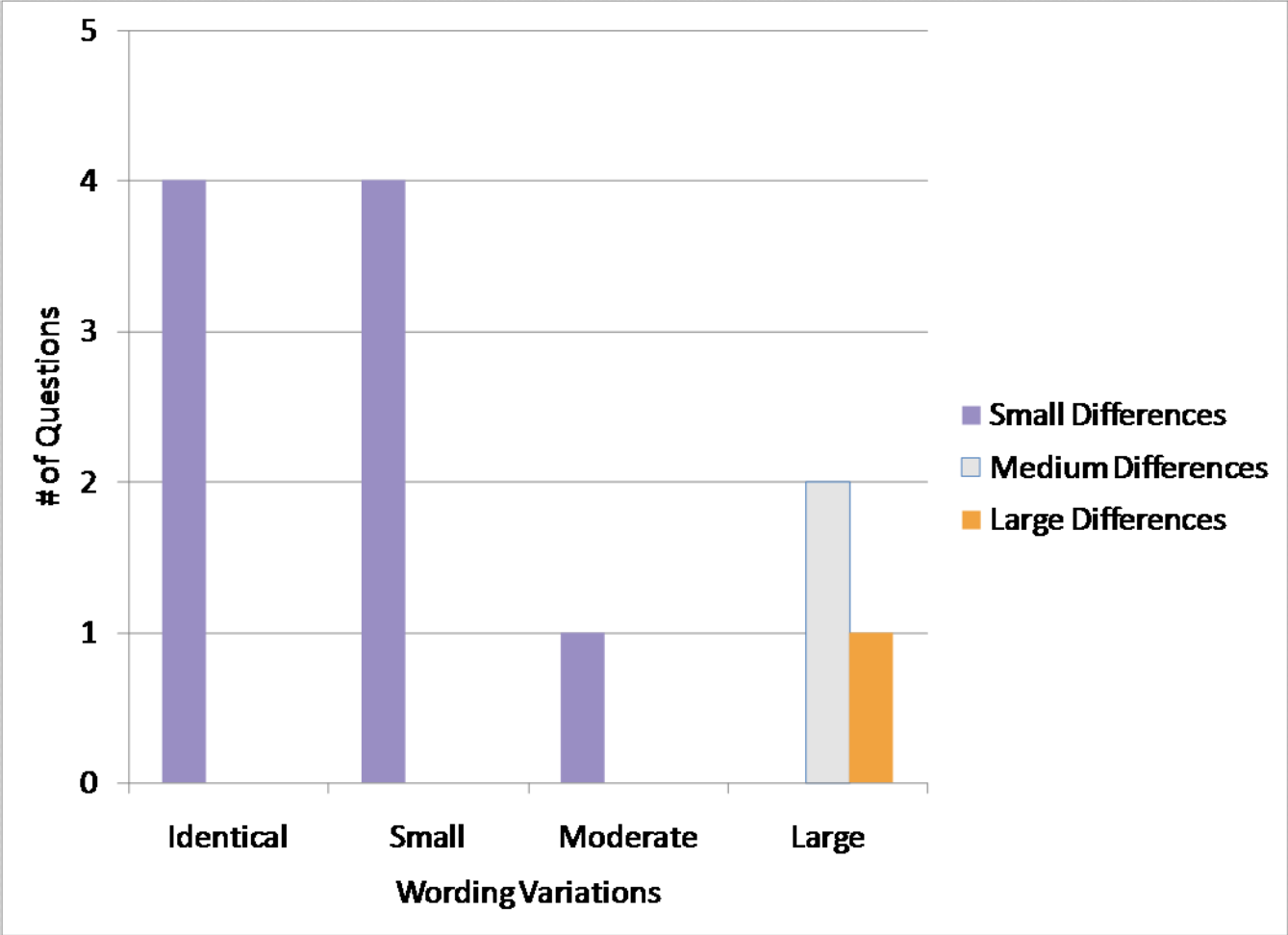
- Secondhand smoke causes heart disease



- Are you bothered by secondhand smoke?



# Consistent wording leads to consistent results



# Summary

# Sampling

- A sampling procedure should yield a sample that resembles the population of interest.
  - It is likely the County-Level Phone sexual orientation question is not yielding reliable classification. There are high rate of “don’t know” and “refused” answers.
  - Less than one percent of the County-Level Phone sample identified as LGB---a conservative estimate would be 4-5% of the population or 2000-2500 individuals
  - The Pride Festival and Web-based LGB samples are more representative of the general Missouri census for age compared to the County-Level Phone LGB.



# Smoking & Attitudes

- All three studies find: significantly higher smoking rates (38 – 50%) than general population studies in Missouri (24%)
- Our LGB samples show lower levels of support for smoke-free environments and lower levels of belief that exposure to secondhand smoke is harmful compared to published general population research
  - Web LGB show stronger support for smoke-free policies; they also have the highest percent of former smokers

# Discussion

- Is 10% of a population obtained through convenience sampling adequate to estimate essential characteristics of a priority population (the truth)?
- How do we improve the reliability/accuracy of disclosure of sexual orientation/gender identity?
- Should we have a consensus statement or published best practices for classifying sexual orientation when conducting varying types of research (telephone; web; face-to-face interview; paper-n-pencil survey)?

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